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INTRODUCTION TO FISHERY POLICY AND PLANNING DATA BANK (FIPPDAT)

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Fishery Development Planning Service
Fishery Policy and Planning Division
FAO Fisheries Department

FOOD AND AGRICULTURE ORGANIZATIONS OF THE UNITED NATIONS
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PREPARATION OF THIS DOCUMENT

This document is a preliminary presentation and user's guide of the Fishery Policy and Planning Databank (FIPPDAT) which has been developed during the last two years. Data contained in FIPPDAT at country and sub-regional level will be regularly published and FIPPDAT software and database files will be distributed when fully operational. Comments and suggestions are invited on presentation and contents of FIPPDAT. Correspondence should be directed to the Chief, Fisheries Development Planning Service, Fishery Policy and Planning Division, Fisheries Department, FAO, Via delle Terme di Caracalla, 00100 Rome.

This document was prepared by E. Seki, A. Bonzon and R. Willmann of the Fishery Development Planning Service, Fishery Policy and Planning Division, FAO Fisheries Department. The authors wish to thank all those who provided assistance and advice in building FIPPDAT. In particular, in respect to the software, the initial major programming work was undertaken by Mr. J. Fusilier. Subsequently, assistance was received from Mr. U. Seidl in the programming of update and split-up routines. Special thanks are due to Mr. E. Yu who provided the finishing touch to all the programmes and who got rid of, hopefully, all the main bugs.

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ABSTRACT

Fishery Policy and Planning Data Bank (FIPPDAT) is a PC-based databank software which draws upon data available with various UN and FAO data bases, the Fishery Country Profile series as well as data consolidated from field survey reports and documents. The main objectives of FIPPDAT are to improve access to, and encourage and facilitate collection and compilation of key information on the structure and socio-economic roles of the fisheries sectors of countries. The purpose of this circular is to introduce FIPPDAT to fisheries administrators, staff of national and international governmental and non-governmental organizations and researchers.

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The FAO Fisheries Circular is a vehicle for the distribution of short or ephemeral notes, lists, etc., including provisional versions of documents to be issued later in other series

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1. Introduction

Food production is a priority for most developing countries. Fisheries significantly contribute to the supply of high quality protein and micronutrients, employ many people and generate substantial incomes. The world population could reach 6.5 billion by the year 2000 and the need for increased food supplies is expected to generate additional demand for fish, placing additional heavy pressure on limited stocks.

Fishery resources are constrained by their natural productivity, location and distribution, and are very sensitive to changes in aquatic ecosystems. Interactions between different economic sectors influence the use of fisheries resources. Continuous environmental degradation affect fresh water fish habitats and the productive coastal marine areas. Furthermore in the absence of effective management, the steady high fish demand on world markets has considerably threatened the sustainability of certain stocks. Therefore a multi-disciplinary approach to fisheries development and management planning is necessary, taking into account national macro-economic policies and development opportunities and priorities of various economic sectors.

In most developing countries small-scale fisheries produce the greater part of the fish supplies which are mainly used for human consumption. They also account for most employment in fisheries and are among the main income earners in many coastal areas. The socio-economic importance of small-scale fisheries is, however, rarely adequately reflected in available fishery statistics at the national and international levels. The same observation is often valid for the entire fisheries sector because readily available statistical information often omits separate reporting on fisheries.

The Fishery Policy and Planning Databank (FIPPDAT) has been developed to facilitate better appreciation of the structure and socio-economic roles of fisheries, and to provide easy access to some of the essential data required for fisheries planning and management at the country level. This tailor-made databank builds upon and expands the information contained in the Fishery Country Profile Series which, since 1972, provides pertinent information on the fisheries sectors of, at present, 140 countries. This series has been in great demand by FAO member countries, aid agencies and other governmental and non-governmental organizations interested in fisheries.

FIPPDAT also builds upon the socio-economic data base on African fisheries which was a first attempt to consolidate social and economic information derived from various publications, FAO data bases, country profiles, published and unpublished documents, and reports available in the FAO Fisheries Branch Library (Bonzon and Horemans, 1988).

FIPPDAT is a cooperative effort of the Fishery Development Planning Service and the Fishery Information, Statistics and Data Service (FIDI). It draws upon data sources available with various UN and FAO data bases, the Fishery Country Profile Series as well as data consolidated from field survey reports and documents (eg. field programme working papers, technical documents, sector reviews, mission reports etc.).

The purpose of this Fishery Circular is to introduce FIPPDAT to fisheries administrators, researchers, staff of international aid agencies, governmental and non-governmental organizations, and individuals involved in development and management of fisheries. The document explains the objectives of FIPPDAT, describes the sources and nature of the data, and provides a user's guide to the installation and running of the computer programme.

2. Objectives

The major objective of FIPPDAT is to improve access to available key information on economic, social and fisheries aspects in time series, by country or statitical areas. FIPPDAT allows users to extract and export data to analytical packages (eg. spreadsheets, statistical packages, graphics programmes etc.) for data handling and analysis. Other data bases can be linked with FIPPDAT to obtain national level socio-economic information and add more regional-specific data or national economic data for specific socio-economic analyses.

Further, FIPPDAT facilitates compilation and storing of selected social and economic data from field survey reports and documents. It is a highly flexible and adaptable databank and ready to receive data from various sources.

FIPPDAT also encourages the collection and compilation of essential fishery data, particularly with regard to socio-economic information, that are lacking in many countries. Information on the small-scale fisheries sub-sector is particularly scarce compared to industrial fisheries, due to the highly diverse and complex characteristics of small-scale fisheries including the scattered, remote and seasonal nature of fishery operations. Furthermore, there is scope for improved regional or sub-regional cooperation with regard to the collection of data on shared fisheries, on the informal trade in fishery products, and on fisherfolk migration, particularly in Africa. FIPPDAT could provide a basis for the collection of regionally standardized socio-economic data, especially on small-scale fisheries.

3. Data contents

The data contained in FIPPDAT are derived from many different sources. A large number of them are obtained from well-established databases of the United Nations System including FAO, UN Statistical Office, World Bank and ILO (Figure 1). The original sources of these databases are generally the statistical offices of countries. The geographical coverage of UN statistics varies with the nature of the data. For example, population figures are available for most countries and statistical area, while fishery GDP and fleet data are very incomplete. At present, FIPPDAT contains data of 211 countries or areas from five continents, i.e. Africa, America, Asia, Europe and Oceania. Recent political developments in Eastern Europe and part of Africa are not yet reflected.

In addition to the UN system, FIPPDAT contains data compiled from national statistical reports, field studies and other documents. Data derived from these sources provide useful raw estimates but often do not follow common standards and definitions. Therefore, with respect to these data, caution needs to be excercised in interpreting the results of regional aggregations and cross country analyses. At present, only data have been compiled from these sources for Asian and African countries are entered onto FIPPDAT files.

The data are structured in 14 files as follows:

Data file 1.	Geophysical features and fisheries potential
Data file 2.	Population and employment
Data file 3.	Gross domestic product
Data file 4.	ODA, debt and balance of payment
Data file 5.	Trade
Data file 6.	Social indicators
Data file 7.	Domestic fish production by economic species groups
Data file 8.	Fish production by sub-sectors
Data file 9.	Food balance and nutrition
Data file 10.	Fish export by commodity groups
Data file 11.	Fish import by commodity groups
Data file 12.	Fishing fleets
Data file 13.	National price of fish and other animal products
Data file 14.	National wages and prices (indices)

With the exception of data file 1, FIPPDAT contains time series data of annual aggregates. The time period covered by the series varies greatly, particularly for those data which have been extracted from field studies, reports etc. For complete series, the earliest entry is 1970 and the latest 1990.

The variables selected for FIPPDAT fall broadly into three categories. The first category refers to physical and geographic conditions including the extent of arable land and size of fishery resources (Data file 1). In combination with other variables, some indication of the relative abundance of the agriculture and fishery related natural resource base is provided.

The second category of variables refers to key social and economic indicators of the country (Data files 2, 3, 4, 5, 6 and 14). These include, for example, time series data on rural and urban population, gross domestic product, balance of payment, debt, life expectancy and price indices. They allow the analysis of the fishery sector trends within the macro-economic and social development context of the country. In particular,

comparisons can be made between the overall development of the country and the particular development in the fishery sector in terms of employment, incomes, prices, exports, imports, etc.

The third category of variables is fishery specific; it includes annual data on the numbers of fishermen and fishing vessels, and on fish catches, exports, imports, consumption and prices. These data provide details on the structure and trends of the fisheries sectors and the relative importance of different sub-sectors. (Data files 2, 3, 4, 7, 8, 9, 10, 11, 12 and 13).

Caution must be taken in respect to the comparability and consistency of some variables contained in the FIPPDAT data files. Discrepancies may occur between official data and those obtained from various studies, survey reports and documents based on field obervations. For instance, total domestic fish production reported in official statistics of some countries may differ from the sum of domestic artisanal and industrial production reported elsewhere. This may be partly due to the fact that in some countries, fishery statistical systems lack sufficient means for proper collection and processing of data, and consequently such data are not reported regularly in a standardized fashion. In addition, the definition of some categories, such as artisanal and industrial sub-sectors, differ from country to country. Although efforts are being made to eliminate these discrepancies, users are urged to take these limitations into account in interpreting the data particularly when making cross-country analysis.

4. Data sources and annotation

Details of the FIPPDAT structure and data sources are provided in Annex 1.

Definitions and concepts of some of the important data contained in FIPPDAT are presented below. FIPPDAT users are also referred to the original data sources for details on definitions.

DATA FILE 1: GEOPHYSICAL FEATURES AND FISHERIES POTENTIAL

Total area refers to the total area of the country including inland water bodies.

Land area refers to total area, excluding inland water bodies. The definition of inland water bodies generally includes minor rivers and lakes.

Arable land refers to land under temporary crops (double-cropped areas are counted only once), temporary meadows for mowing or pasture, land under market and kitchen gardens (including cultivation under grass), and land temporarily fallow or lying idle.

Sources of definition and data of the above three variables are FAO Yearbook of Production and AGROSTAT/LUI[1] Item 1421.

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[1] AGROSTAT (Information System of Food and Agriculture) Domains

LUI: Land use, inputs and production
DEA: Demographic estimates - annual series
CLF: Crops, livestock and fishery products
SUA: Supply/utilization accounts
GDP: UN national accounts
WBT: World Bank tables
WCI: ILO wages and consumer price indices
WNA: World Bank national accounts
WSI: World Bank socio-economic indicators
WDB: World Debt Tables

Inland water area

The figure entered in FIPPDAT is, wherever available, the estimate of the area of "permanent" water bodies such as lakes, reservoirs, tanks, rivers and canals. Brackishwater areas, irrigated paddy fields and flood plains of rivers were generally excluded as these are subject to great seasonal variations. It should be noted, however, that the area of "permanent" water bodies may be subject to great inter-annual fluctuations. Major sources are the Source Book for the Inland Fishery Resources of Africa (SIFRA) vols. 1,2 and 3 and the Inland Fisheries Resources of Indo-Pacific Countries, FAO Fishery Circular, No. 794.

Length of coast

Data presented in the Ocean Yearbook, Volumes 2,3 and 8 (Borgese, E. M., Ginsburg, N., Morgan, J. R. eds. 1980, 1981) and FAO Fishery Country Profile Series are referred to.

EEZ area

EEZ area is a hypothetical area to 200 nautical miles in square kilometer. Major source of data is the Ocean Yearbook, Volumes 2 and 3 (Borgese, E. M., Ginsburg, N., Morgan, J. R. eds. 1980, 1981).

Shelf area refers to the Continental Shelf as defined by 1982 United Nations Convention of the Law of the Sea. Sources include FAO Fishery Country Profile series and Ocean Yearbook, vol. 7 (1988).

Estimated marine (pelagic and demersal) and inland potential

The highest and the lowest figures observed in various sources are entered as a) high and b) low estimates. When only one estimate is available, such data is treated as high estimate. Sources include Source Book for the Inland Fishery Resources of Africa (SIFRA) vols. 1,2 and 3, Inland Fisheries Resources of Indo-Pacific Countries (FAO Fishery Circular, No. 794), FAO Fishery Country Profile Series and various reports.

DATA FILE 2: POPULATION AND EMPLOYMENT

Population, Rural population

Series of annual estimates are obtained from AGROSTAT/DEA Item 3008. The data was interpolated by Statistical Analysis Service, Economic and Social Policy Department (ESSA) of FAO on the basis of UN quinquenium demographic projections.

Total labour force stands for total economically active population as defined by ILO. It comprises all employed and unemployed persons (including those seeking work for the first time) and covers employers, self-paid workers, employees, unpaid family labours, etc.. The source of data is AGROSTAT/DEA Item 3008.

Total agricultural labour force refers to economically active population in agriculture which includes economically active population engaged or seeking work in agriculture, hunting, fishing or forestry. The source of data is AGROSTAT/DEA Item 3008.

Fisheries employment

Definitions of "primary" and "secondary" employment follow UN standard classification of industries, UN Commission of Statistics. Total fisheries employment includes numbers of persons engaged in primary and secondary sectors, industrial and artisanal sectors, and full-time and part-time categories. Fisheries employment data is often found in field survey reports and mission reports but a clear definition is rarely given. There are so far no standard procedures for reporting gender disaggregated employment data.

Fisheries employment in primary sector refers to the "Number of those engaged in production sector, harvesting and landing site based activities". This includes fishermen, and those who land the fish and do some of the grading and processing (eg. gutting, scaling etc.) before fish is being sold. Numbers of seasonal fishermen and sport fishermen are usually excluded.

According to the guideline of the Coordinating Working Party on Atlantic Fishery Statistics (CWP), the "fishing population" is equivalent to "primary" fishery employment and includes all commercial, industrial and subsistence fishermen and fisherwomen operating in freshwater, brackish water, and marine waters in economically inspired efforts to catch and land any of the great variety of aquatic animals and plants. The fishermen and fisherwomen should include not only those operating from fishing vessels of all types, but also those operating land-based fishing gears and installations from the banks of rivers, lakes, canals, dams etc., from beaches and shores and which do not require the use of auxilliary boats. People working on fish farms, hatcheries, and employed in shell fish culture operations should also be included.

Fisheries employment in secondary sector refers to post-harvest processing activities which includes freezing, fermentation and canning etc. Number of labourers engaged in small scale processing and informal marketing are often not enumerated since they are not identified as an "establishment" which is a statistical enumeration unit. Though many female labourers are engaged in these activities, only those working on the processing line in the factory are enumerated.

It must be noted that fishery employment data contained in FIPPDAT may not follow the above definitions but rather national practices. Major sources are the FAO Country Profiles series, "Fishermen system" in FISHDAB and various field reports and documents.

As for artisanal employment, there is so far no standardized definition of "artisanal" fishermen as there is no common agreement on the definition of "artisanal" and "industrial" fisheries sub-sectors. Some countries disaggretate catch data by category of artisanal or small-scale sector and the industrial or large-scale fisheries by country specific criteria which may be based on Gross Registered Tonnage (GRT), length (L.O.A.), type or size of propulsion unit, area of operation, number of crew, types of ownership, or types of gear used. Data contained in reports and statistical publications usually follow national definitions, wherever available. The same definitons, therefore, also apply to FIPPDAT. The lack of standardization requires caution in cross country comparisons and aggregations.

Part-time employment

The definition of part-time fishermen according to the agreement in the Coordinating Working Party on Atlantic Fishery Statistics (CWP) is fishermen receiving less than 90 % of their livelihood from fishing or spending at least 30 % but less than 90 % of their working time in that occupation. Information on these criteria are often lacking and, therefore, data in FIPPDAT may not adhere to this definition. For instance, many socio-economic studies on African fisheries define part-time fishermen as those who do not depend on fishery activities as their major source of household income. Data sources include various reports and documents as well as the FAO Country Profiles Series and the FAO Fisheries Department database "Fishermen system".

DATA FILE 3: GROSS DOMESTIC PRODUCT

Gross Domestic Product (GDP) at Market Prices, GDP Agriculture, GDP Agriculture Factor Cost are obtained from AGROSTAT/GDP Item 3010,3011 (National Account Aggregates). 1980 is used as base year for constant price series.

Fishery GDP

The definition of Fishery GDP follows the concept of the UN System of National Accounts (SNA). Data provided is the total value added of fishery holdings by summing up all value added based on the gross production figure less intermediate consumption (such as fuel, fishing gears, spare parts, boats and engines). The major source of this data is National Account Statistics: Analysis of Main Aggregates, UN Statistical

Office. The Hand Book of National Accounting, Accounting for Production: Sources and Methods, UN Studies in Methods, Series F, No. 39 was referred to for the definition.

Fishing which includes catching fish, whales or seals, and gathering seaweeds, sponges, sea shells, pearls, oysters and other shellfish from oceans, seas, lakes, rivers, rice fields and fish farms and the processing of fishery products on board fishing boats and factory vessels, such as salting and freezing are accounted for. Sports fishing is usually excluded. It also includes the fish catches of resident establishments (usually those with flag of registration) fishing in international waters.

Where small-scale fishing units contribute a major part of the production but their catch and landings data collection are not sufficiently developed, the fishery GDP figure is most likely under-estimated.

Fishery GDP data is not always separately identified in the National Accounting system. Fishery censuses are conducted in a few countries where fisheries is an important industry and usually supply information on employment (sometimes classified by types of employment), characteristics of fishing units, fishing implements, area of fish-ponds and other data concerning the stucture of the industry. Such a survey enables estimation of the quantity and value of gross output, inputs and total value added of the fishery sector.

Gross value of fisheries output is shown in ex-vessel prices. Source of data is FAO Fishery Country Profile Series, national fishery statistical reports and sector reviews.

GNP per capita figures are from AGROSTAT/WBT Item 3040, the original source being the World Bank.

Private Consumption Expenditure equals the market value of all goods and services purchased or received as income in kind by individual and non profit institutions. Source of data is AGROSTAT/GDP Item 3010.

DATA FILE 4: ODA, DEBT AND BALANCE OF PAYMENT

Official external assistance to fishery sector

The data are obtained from the Fishery Project Information System (FIPIS) and refer to the total nominal funds committed each year starting with 1985. Excluded are all kinds of external assistance provided by the private sector, joint ventures or non-governmental organizations.

Longterm external debt is defined as a debt that has an original or extended maturity of more than one year and that is owed to non-residents and repayable in foreign currency, goods or services. Long term debt has three components: public debt, publicly guaranteed debt and private non-guaranteed external debt. The figure on public long-term debt in FIPPDAT includes both public debt and publicly guaranteed debt. The data does not include data for transaction with the IMF, debt repayable in local currency or foreign direct investment.

Net transfer is an indicator of debt flows. Net transfers are balances between net lending and debt service payment. Debt service is the sum of principal repayment and interest payments actually made.

International reserves are the sum of a country's holdings of special drawing rights (SDR's), its reserve position in the IMF and its holdings of foreign exchange. Holdings of gold are excluded.

The above three data on external debt of developing countries are obtained from AGROSTAT/WDB Item 3162, 3171, 3172. World Debt Tables Prepared by World Bank is the original source of data.

DATA FILE 5: TRADE

Value of imports, exports, agriculture imports and exports refer to general trade except some countries which report on the basis of special trade. General imports consist of all imports into a country, including goods for domestic consumption and imports into bonded warehouses or free zones. General exports consist

of the combined total of national exports and re-exports. Re-exports, in the general trade system, consist of the outward movement of nationalized goods plus goods which, after importation, move outward from bonded warehouses by free zones without having been transformed.

Special trade is a system of recording imports for domestic consumption on the one hand and exports of domestic goods on the other. Special imports include goods for domestic consumption and withdrawals from bonded warehouses or free zones for purposes of domestic consumption. Special exports comprise exports of goods wholly or partly produced or manufactured in the country, together with exports of 'nationalized goods' but not of goods held in bonded warehouses or free zones. The countries reported on the basis of special trade are listed in the general notes of FAO Yearbook of Trade and FAO Yearbook of Fishery Statistics, commodities.

Sources of data and definition are AGROSTAT/CLF Items 1881 and 1882 (Agricultural External Trade), FISHDAB and FAO Yearbook of Trade.

DATA FILE 6: SOCIAL INDICATORS

Crude birth rate refers to the number of birth per 1,000 population in a given year. AGROSTAT/WBT Item 3040 (World Bank Tables) is referred to for World Bank projections.

Total fertility rate

Average number of children that would be born alive to a women during her lifetime. AGROSTAT/WBT Item 3040 (World Bank Tables) is referred to for World Bank projections.

Life expectancy

Number of years a new born infant would live if prevailing patterns of mortality at the time of its birth were to stay the same througout its life. AGROSTAT/WBT Item 3040 (World Bank Tables) is referred to for World Bank projections. The figure on female life expectancy is obtained from World Development Reports.

Infant mortality rate refers to the number of deaths of infants under one year of age per 1,000 live birth in a given year. AGROSTAT/WBT Item 3040 (World Bank Tables) is referred to for World Bank projections.

Population per physician

The figure for physicians includes, in addition to the total number of registered practitioners in the country, medical assistants whose medical training is less than that of qualified physicians, but who nevertheless dispense similar medical services, including simple operations. Data on this category is obtained from AGROSTAT/WSI Item 3021 (World Bank Social Indicators) the original source being the World Bank Social Indicators of Development (SID).

Illiteracy rate

Defined by UNESCO as the proportion of the population 15 years of age and older who cannot, with understanding, both read and write a short simple statement on everyday life. Data on this category is obtained from AGROSTAT/WSI Item 3021 (World Bank Social Indicators) the original source being the World Bank Social Indicators of Development (SID).

Access to safe water

Percentage of population with reasonable access to safe water supply. Safe water sypply includes treated surface waters or untreated but uncontaminated water such as that from springs, sanitary wells and protected boreholes. In an urban area this may be a public fountain or standpost located not more than 200

metres from the dwelling. In rural areas it implies that members of the household do not have to spend a disproportionate part of the day fetching water. Data on this category is obtained from AGROSTAT/WSI Item 3021 (World Bank Social Indicators) whose original source is World Bank Social Indicators of Development (SID).

Access to Electricity refers to conventional dwellings with electricity in the living quarters, as a percentage of all dwellings. Data on this category is obtained from AGROSTAT/WSI Item 3021 (World Bank Social Indicators) whose original source is World Bank Social Indicators of Development (SID).

Poverty line refers to the estimated level below which a minimal nutritional adequate diet plus essential nonfood requirement are not affordable. These estimate are made by World Bank, UN, and UNICEF based on special surveys. Data on population in absolute poverty is obtained from AGROSTAT/WSI Item 3021 (World Bank Social Indicators) whose original source is World Bank Social Indicators of Development (SID).

DATA FILE 7: DOMESTIC FISH PRODUCTION BY ECONOMIC SPECIES GROUPS

Fish production refers to "nominal catches" which is a live weight equivalent of "landings". There are many instances where the catches onboard fishing vessels or factory ships are gutted, eviscerated, filleted, salted, dried, etc. or reduced to meals, oil, etc. The data on the "landing" of such species and products are converted by accurate yield rates (conversion factors) to establish the live weight equivalents (nominal catches) at the time of capture. Sources of data and definition are FISHDAB, FAO Yearbook of Fishery Statistics, catches and landings and Handbook of Fishery Statistics.

Inland water production includes fish production from inland fresh and brackish water areas (eg. lagoons, estuaries). Marine water production includes fish production from inshore, offshore and highsea fishing areas. Statistics for mariculture, aquaculture and other kinds of fish farming, etc. are included in the total figure. Sources of data and definitions are FISHDAB and FAO Yearbook of Fishery Statistics, catches and landings.

Economic species groups were arranged on the basis of species groups used in International Standard Statistical Classification of Aquatic Animals and Plants (ISSCAAP). Species which are important from an economic point of view and with similar economic values are grouped together as follows;

Small pelagic:	Shads(24); Miscellaneous diadromous fishes (25); Jacks, mullets, sauries (34); herrings, sardines, anchovies (35); mackerels, snoeks, cutlassfishes (37); Sharks, rays, chimaeras (38)
Demersal:	Flounders, halibuts, soles (31); cods, hakes, haddocks (32); red fishes, basses, congers (33)
Tunas, bonitos:	Tunas, bonitos, billfishes (36)
Shrimps, prawns:	Shrimps, prawns (45)
Crabs & lobsters:	Sea-spiders, crabs (42); lobsters, spiny-rock lobsters (43); squat-lobsters (44)
Squid, cuttle fish:	Squid, cuttlefishes, octopuses (57)
Other crustaceans & molluscous:	Krill, planktonic crustaceans (46); miscellaneous marine crustaceans (47); abalones, winkles, conchs (52); oysters (53); mussels (54); scallops, pectens (55); clams, cockles, arkshells (56)
Salmon:	Salmons, trouts, smelts (23)

DATA FILE 8: FISH PRODUCTION BY SUB-SECTOR

Foreign fleet production is the nominal catch by the foreign flag vessels. This excludes a foreign flag vessel chartered by the host country or the vessel carrying out fishing operations for the host country under joint venture contracts (Fishery Statistics Handbook and Fishery Fleet Statistics). Major sources of data are various studies, sector review, reports of Fishery Commisions, field documents and mission reports.

Domestic production is the nominal catch (live weight equivalent) landed at domestic ports by national fleets. The figure excludes fish caught by foreign fleets and landed in domestic ports. The "flag country", which refers to the country in which the vessel is registered is generally used to assign its nationality. Major sources of data are various studies, sector review, field documents and mission reports.

Aquaculture production figure is obtained mainly from Aquaculture Production (FIDI/C815), Source book for the inland fishery resources of Africa (SIFRA) vols. 1,2 and 3, and other statistical reports. Aquaculture is defined as the farming of aquatic organisms, including fish, molluscs, crustaceans and aquatic plants. Farming implies some forms of intervention in the rearing process to enhance production, such as regular stocking, feeding, protection from predators, etc. Farming also implies individual or corporate ownership of the stock being cultivated. Aquatic organisms which are harvested by an individual or corporate body which has owned them throughout their rearing period contribute to aquaculture, while aquatic organisms which are exploitable by the public as a common property resource, with or without appropriate licences, are the harvest of fisheries (Aquaculture Production).

DATA FILE 9: FOODBALANCE AND NUTRITION

Fish production in this data file refers to catch and cultured aquatic products excluding mammals and aquatic plants.

Other non-food uses includes utilization of aquatic products for feed, bait, ornamental purposes, production of jewellery from the shell of molluscs and any other non-food use of the production, except reduction to meal and oil.

Total fish supply is a figure equivalent to:
Production (minus) reduction to meal (minus) non-food uses (plus) imports (minus) exports (plus/minus) stock variation.

Per caput fish protein supply is the estimate of the total fish protein supply for human consumption divided by the estimate of the population.

Fish as percent total protein intake is equivalent to:

per caput fish protein/day (divided by) per caput protein/day (multiplied by) 100.

Fish as percentage of total animal protein is equivalent to:

per caput fish protein/day (divided by) per caput protein from animal products (multiplied by) 100

Sources of the above mentioned data are AGROSTAT/SUA Item 1701 and a fishery module of the Supply and Utilization Account contained in Interlinked Computerized System of Agricultural Statistics (ICS) developed jointly by Statistical Division, Economic and Social Policy Department (ESS) and FIDI.

Total daily calorie supply per capita is energy equivalent of net food supplies in a country, per capita, per day. Food supplies comprise domestic production,imports less exports and changes in stock. Source of data is AGROSTAT/SUA Item 1701 (Food Balance).

DATA FILE 10: FISH EXPORT BY COMMODITIES

Export statistics include fish caught by domestic fishing craft, whether or not processed on board, landed in foreign ports. Export value are in free on board (f.o.b.) prices. Data is obtained from FISHDAB.

DATA FILE 11: FISH IMPORT BY COMMODITIES

Import statistics include fish caught by foreign fishing vessel, whether or not processed on board, landed in domestic ports. Import value are cost, insurance and freight (c.i.f.) prices. Data is obtained from FISHDAB.

DATA FILE 12: NATIONAL FISHING FLEET

Fishing vessel is a fishery vessel engaged in catch operations and includes mother vessels and processing vessels. Vessels performing other operations such as supplying, protecting, rendering assistance or conducting research or training are excluded. Data is obtained from various studies, sector reviews, field documents and mission reports as well as the Fishery Fleet Statistics: Bulletin of Fishery Statistics.

In FIPPDAT, no standardized definition is applied to "artisanal fleet "as opposed to "industrial fleet". The national definitions, wherever available, have been applied for the data in FIPPDAT. Some countries disaggretate data by artisanal or small-scale sector and industrial or large-scale sector according to country specific criteria which may be based on Gross Registered Tonnage (GRT), length (L.O.A.), type or size of propulsion unit, area of operation, number of crew, types of ownership, or types of gear used. In the case of Africa, artisanal craft include all non-decked vessels (canoes). "Semi-industrial fleets/advanced artisanal fleets", operating in near shore waters are categorized as "artisanal fleet" in FIPPDAT.

The different criteria used in defining artisanal and industrial sub-sectors require caution in cross country comparisons and aggregations.

DATA FILE 13: NATIONAL PRICES OF FISH AND OTHER ANIMAL PRODUCTS

Price is shown in nominal current price in local currency. Data is obtained from national statistics, studies, sector reviews, field documents, GLOBEFISH and mission reports.

DATA FILE 14: NATIONAL WAGES AND PRICES

Consumer price indices reflect prices of goods and services used for private consumption of households. They refer to annual averages and are designed to measure changes over time in the retail price level of goods and services. 1980 is used as a base period for the presentation of data. Source of data is ILO Year Book of Labour Statistics.

Retail and whole sale price indices

Source of data is AGROSTAT/WNA Item 3037 (World Bank National Account).

Wage indices in agriculture generally refer to farm labourers. Wage indices in non-agricultural activities include the following economic activities: mining and quarring; manufacturing; electricity, gas and water; constuction; whole-sale and retail trade, restaurants and hotels; transport, storages and communication; financing, insurance, real estate and business services; community, social and personal services. 1980 is generally used as a base period for the presentation of data. Source of data is ILO Year Book of Labour Statistics.

5. Functions contained in FIPPDAT

5.1 Data entry and display

Users can view, enter and modify data file by file and country by country.

5.2 Data extraction and export

FIPPDAT allows users to choose any data in the datafiles (except Datafile 1) and transform them to relevant ASCCI files for wordprocessing, database files for data processing and graphic presentations. The data extraction function allows to specify variables, countries and period of year in one routine. Exported data files can be imported into various wordprocessing, spreadsheet, statistical packages and graphics programmes for analytical uses.

5.3 Report

FIPPDAT makes print-outs of data contained in two forms: (1) the most recent data of each variable; and (2) time series data in a selected file.

5.4 Data analysis

Calculation of growth rates and correlation coefficient are included in this option. A quick view of the trend of selected variables (eg. production, trade, population, employment etc.) can be made. Compounded method is used for the growth rate calculation.

5.5 Search option

This option allows the users to search/select those countries or indicators for which specified variables fall within a set range.

5.6 Utilities

Utilities contain functions for 1. Re-index data files, 2. Back-up files to disk, and 3. Restore data files from disk.

6. Maintenance of FIPPDAT

The data base files contained in FIPPDAT will be updated regularly. Functions of the programme and the structure of data base files contained in FIPPDAT are subject to modification according to needs, availability of certain social and economic data and suggestions from users.

In future, the development of more flexible forms of information management systems may be called for, which could be tailored to the specific information needs of national fisheries administrations. Such fishery information systems could be more detailed and include data on inland fish production by major species groups, by water bodies, by administrative boundaries/ agro-ecological zones, institutional indicators on fishery administrations, national budgetary and human resources allocations, on-shore facilities and infrastructures, investment opportunities, taxes and subsidies for major fishing inputs, and others.

7. Distribution mechanisms

FIPPDAT will be distributed as an open databank system, in the form of diskettes according to the rules and regulation of FAO. The package will include a routine to update from modified FIPPDAT data files. A pilot version containing data for Africa and Asian countries will be made available on a pilot basis to selected users. In addition, data contained in FIPPDAT will be published at regular intervals by sub-region and/or by continent. Enquiries regarding FIPPDAT should be addressed to:

Chief
Fishery Development Planning Service
Fishery Policy and Planning Division
Fisheries Department
Food and Agriculture Organization of the United Nations
Via delle Terme di Caracalla
00100 Rome
Italy

ANNEX 1.

STRUCTURE OF FISHERY POLICY AND PLANNING DATA BANK

DATA FILE 1: GEOPHYSICAL FEATURES AND FISHERIES POTENTIAL (GEOPHYS.dbf)

Title	Field name	C/N No.	Unit	Data source	
Country name	COUNTRY	C 15			
Country code	COUNTRYCOD	C 4		ESS code	
Total area	TOTALAREA	C 7	sqkm	AGROSTAT/LUI*	Item 1421/011
Land area	LANDAREA	C 7	sqkm	AGROSTAT/LUI*	Item 1421/031
Inland water area			sqkm	various studies	
Arable land	ARABLEAREA	C 7	sqkm	AGROSTAT/LUI	Item 1421/071
Length of coast	COASTLINE	C 5	km	Country profiles/reports	
Shelf area	SHELFAREA	C 7	sqkm	Country profiles/reports	
EEZ area	EEZAREA	C 7	sqkm	Ocean Yearbook	
Estimated marine					
potential a) high	MARHIGH	C 7	tons	various studies	
b) low	MARLOW	C 7	tons	various studies	
- demersal a) high	DEMHIGH	C 7	tons	various studies	
b) low	DEMLOW	C 7	tons	various studies	
-large pelagic a) high	LPHIGH	C 7	tons	various studies	
b) low	LPLOW	C 7	tons	various studies	
- small pelagic a) high	SPHIGH	C 7	tons	various studies	
b) low	SPLOW	C 7	tons	various studies	
Estimated inland					
potential a) high	INLANDHIGH	C 7	tons	various studies	
b) low	INLANDLOW	C 7	tons	various studies	

DATA FILE 2: POPULATION AND EMPLOYMENT (MACROPOP.dbf)

Title	Field name	C/N No.	Unit	Data source	
Country name	COUNTRY	C 12			
Country code	COUNTRYCOD	C 4			
Year	YEAR	C 4			
Population	POPULATION	C 7	1000	AGROSTAT/DEA*	Item 3008/511
- rural population	POPRURAL	C 7	1000	AGROSTAT/DEA	Item 3008/551
Total labour force	TOTLABOUR	C 6	1000	AGROSTAT/DEA	Item 3008/591
- female labour force	FEMLABOUR	C 6	1000	AGROSTAT/DEA	Item 3008/593
Agricultural labour force	AGRILABOUR	C 6	1000	AGROSTAT/DEA	Item 3008/601
- fem. agri. labour force	FMAGLABOUR	C 6	1000	AGROSTAT/DEA	Item 3008/603
FISHERIES SECTOR					
Fisheries employment	FISHEMPLOY	C 7	numbers	FIDI/various studies	
-of which female	FEFEMALE	C 7	numbers	various studies	
-primary sector	PRIMARY	C 7	numbers	FIDI	
-secondary sector	SECONDARY	C 7	numbers	various studies	
*of which industrial	FEINDUSTRY	C 7	numbers	various studies	
Art. fishermen(total)	ARTFISHER	C 7	numbers	various studies	
-marine	ARTMARINE	C 7	numbers	FIDI/various studies	
-of which part time(%)	ARTMPART	C 7	percent	FIDI	
-inland	ARTINLAND	C 7	numbers	various studies	
-of which part-time(%)	ARTIPART	C 7	percent	various studies	
Aquaculturist total	AQUACULTOT	C 7	numbers	various studies	

DATA FILE 3: GROSS DOMESTIC PRODUCT (MACROPRO.dbf)

Title	Field name	C/N No.	Unit	Data source	
Country name	COUNTRY	C 12			
Country code	COUNTRYCOD	C 4			
Year	YEAR	C 4			
GDP Market Prices (curr.)	GDPMCURR	C 7	US$ million	AGROSTAT/GDP*	Item 3010/501
GDP Market Prices (1980)	GDPMCONST	C 7	US$ million	AGROSTAT/GDP	Item 3011/501
GDP Agriculture (curr.)	AGGDPCUR	C 4	US$ million	AGROSTAT/GDP	Item 3010/502
GDP Agriculture (const.)	AGGDPCON	C 4	US$ million	AGROSTAT/GDP	Item 3011/502
GDP Agri. Fac.cost (curr.)	AFGDPCUR	C 4	US$ million		
GDP Agri. Fac.cost (con.)	AFGDPCON	C 4	US$ million		
GDP Fisheries (curr.)	FISHGDPCUR	C 4	US$ million		
GDP Fisheries (const.)	FISHGDPCON	C 4	US$ million		
Gross value of fisheries output (ex-vessel prices)	FISHVALUE	C 4	US$ million	country profile/various studies	
GNP per capita	GNPPC	C 5	US$	AGROSTAT/WBT*	Item 3040/502
Private Consumption Exp. per head (current)	PCEHEAD	C 5	US$	AGROSTAT/GDP	Item3010/504(/population)
Current exchange rate	EXCHRATE	C 7	US$/currency	AGROSTAT/CLF	Item 0005/011

DATA FILE 4: ODA, DEBT AND BALANCE OF PAYMENT (ASSIBALA.dbf)

Title	Field name	C/N No.	Unit	Data source	
Country name	COUNTRY	C 12			
Country code	COUNTRYCOD	C 4			
Year		C 4			
Off. dev. assisance (ODA)					
- total ODA receipts	ODA	C 6	US$ million	WORLD BANK Report	
- ODA receipts per capita	ODACAPITA	C 5	US $	WORLD BANK Report	
- ODA in % of GNP	ODAGNP	C 4	percentage	WORLD BANK Report	
- ext'l ass. to fisheries	ODAFISH	C 7	US$ thousands	FIPIS*/aggregated	
External liabilities					
- total long-term debt	TOTDEBT	C 7	US$ million	AGROSTAT/WDB*	Item 3162/511
- public long-term debt	PUBDEBT	C 7	US$ million	AGROSTAT/WDB	Item 3162/551
- total net transfers	TOTTRANS	C 7	US$ million	AGROSTAT/WDB	Item 3171/511
- public net transfers	PUBTRANS	C 7	US$ million	AGROSTAT/WDB	Item 3171/551
- total debt service (TDS)	DEBTSERV	C 7	US$ million	AGROSTAT/WDB	Item 3172/511
- public TDS	PUBSERV	C 7	US$ million	AGROSTAT/WDB	Item 3172/551
Balance of payments					
- current account balance	BALANCE	C 6	US$ million	AGROSTAT/WBT	Item 3040/588
(- gross int. reserves)	RESERVES	C 6	US$ million	AGROSTAT/WBT	Item 3040/609

DATA FILE 5:TRADE (MACROTRA.dbf)

Title	Field name	C/N No.	Unit	Data source	
Country name	COUNTRY	C 12			
Country code	COUNTRYCOD	C 4			
Year	YEAR	C 4			
Value of imports	TOTIMPORT	C 7	US$ million*	AGROSTAT/CLF	Item 1881/062
Value of exports	TOTEXPORT	C 7	US$ million	AGROSTAT/CLF	Item 1881/092
Value of agr. imports	AGRIMPORT	C 7	US$ million	AGROSTAT/CLF	Item 1882/062
Value of agr. exports	AGREXPORT	C 7	US$ million	AGROSTAT/CLF	Item 1882/092
Value of fish. imports	FISHIMPORT	C 7	US$ million	FISHDAB	
Value of fish. exports	FISHEXPORT	C 7	US$ million	FISHDAB	

DATA FILE 6: SOCIAL INDICATORS (SOCIAL.dbf)

Title	Field name	C/N No.	Unit	Data source	
Country name	COUNTRY	C 15			
Country code	COUNTRYCOD	C 4			
Year	YEAR	C 4			
Demography					
- crude birth rate	BIRTHRATE	C 2	per 1000	AGROSTAT/WBT	Item 3040/612
- total fertility rate	FERTILITY	C 3	per woman	AGROSTAT/WBT	Item 3040/611
- life expectancy (total)	TOTEXPECT	C 2	years	AGROSTAT/WBT	Item 3040/614
- life expectancy (female)	FEMEXPECT	C 2	years	World Bank Report	
Health					
- infant mortality rate	INFANTMORT	C 3	per 1000 live bir.	AGROSTAT/WBT	Item 3040/613
- population per physician	PHYSCIAN	C 5	Numbers	AGROSTAT/WSI*	Item 3021/533
Education					
- illiteracy rate (total)	TOTILLIT	C 2	percentage	AGROSTAT/WSI	Item 3021/550
- illiteracy rate (female)	FEMILLIT	C 2	percentage	AGROSTAT/WSI	Item 3021/551
Community services					
- access to water (total %)	TOTWATER	C 2	percentage	AGROSTAT/WSI	Item 3021/504
- access to water (rural %)	RURALWATER	C 2	percentage	AGROSTAT/WSI	Item 3021/506
- access to elect. (tot. %)	TOTELECT	C 2	percentage	AGROSTAT/WSI	Item 3021/525
- access to elect. (rur. %)	RURELECT	C 2	percentage	AGROSTAT/WSI	Item 3021/526
Income					
- av. capita HH income (urb.)		C 5	US Dollar	AGROSTAT/WSI	
- av. capita HH income (rur.)		C 5	US Dollar	AGROSTAT/WSI	
- % pop. < pov.line (urb.)	TOTPOOR	C 2	percentage	AGROSTAT/WSI	Item 3021/513
- % pop. < pov.line (rur.)	RURPOOR	C 2	percentage	AGROSTAT/WSI	Item 3021/514

DATA FILE 7: FISH PRODUCTION BY ECONOMIC SPECIES GROUPS (mt) (FISHPROD.dbf)

Title	Field name	C/N No.	Unit	Data source	
Country name	COUNTRY	C 12			
Country code	COUNTRYCOD	C 4			
Year	YEAR	C 4			
Total production	TOTPROD	C 8	mt	FISHDAB	
Inland waters	INLAND	C 8	mt	FISHDAB	
Marine waters	MARINE	C 8	mt	FISHDAB	
Marine production by economic species groups:				ISSCAAP GROUPS(marine only):	
Small pelagics	PELAGIC	C 8	mt	FISHDAB	groups 24,25,34,35,37,38
Demersal	DEMERSAL	C 8	mt	FISHDAB	groups 31,32,33
Tunas,bonitos,etc.	TUNA	C 8	mt	FISHDAB	group 36
Shrimps, prawns	SHRIMP	C 8	mt	FISHDAB	group 45
Crabs & lobsters	LOBSTER	C 8	mt	FISHDAB	groups 42,43,44
Squids,cuttle fish	SQUID	C 8	mt	FISHDAB	group 57
Other crust.& moll.	CRUSTACEAN	C 8	mt	FISHDAB	groups 46,47,52,53,54,55,56,58
(Salmon marin&inland)	SALMON	C 8	mt	FISHDAB	part of group 23

DATA FILE 8: FISH PRODUCTION BY SUB-SECTOR (mt) (PRODSUBS.dbf)

Title	Field name	C/N No.	Unit	Data source
Country name	COUNTRY	C 15		
Country code	COUNTRYCOD	C 4		

Year	YEAR	C 4		
Marine waters total	MARINE	C 8	mt	various studies
- Foreign fleets	FOREIGN	C 8	mt	various studies
- Domestic artisanal	ARTISANAL	C 8	mt	various studies
- Domestic industrial	INDUSTRIAL	C 8	mt	various studies
Inland waters total	INLAND	C 8	mt	FIDI/various studies
Aquaculture total	TOTAQUA	C 8	mt	FIDI/various studies
Inland culture	INLANDCULT	C 8	mt	FIDI/various studies
Marine culture	MARINCULT	C 8	mt	FIDI/various studies
- shrimps	SHRIMPCULT	C 8	mt	FIDI/various studies

DATA FILE 9: FOOD BALANCE AND NUTRITION (mt or as stated) (FOODBALA.dbf)

Title	Field name	C/N No.	Unit	Data source
Country name	COUNTRY	C 12		
Country code	COUNTRYCOD	C 4		
Year	YEAR		C 4	
Population	POPULATION	C 8	1000	FISHDAB
Fish production	TOTPROD	C 8	mt	FISHDAB
Reduction to meal	MEALPROD	C 8	mt	FISHDAB
Other non-food use	NONFOOD	C 8	mt	FISHDAB
Imports	FISHIMPORT	C 8	mt	FISHDAB
Exports	FISHEXPORT	C 8	mt	FISHDAB
Change in stocks	STOCKS	C 8	mt	FISHDAB
Total fish supply	FISHFOOD	C 8	mt	FISHDAB
Caput supply/day	FISHCAPUT	C 5	grammes	FISHDAB
Caput protein/day	FISHPROTE	C 4	grammes	FISHDAB
Fish % total protein	PERCENTOT	C 4	percentage	AGROSTAT/SUA/Item 1701/274/FISHDAB
Fish % animal protein	PERCENTAN	C 4	percentage	FISHDAB
Total daily calorie supply per capita	CALORIES	C 4	Numbers	AGROSTAT/SUA* Item 1701/264
Calories in % requirement	CALPERCENT	C 2	percentage	WORLD BANK

DATA FILE 10: EXPORT BY COMMODITIES (VALUE:US$ MILLION; QUANTITY:MT) (FISHEXPO.dbf)

Title	Field name	C/N No.	Unit	Data source
Country name	COUNTRY	C 12		
Country code	COUNTRYCOD	C 4		
Year	YEAR	C 4		
Total export value	FISHEXPORT	C 7	US$ million	FISHDAB
Fresh,chilled,frozen				
- value	FRESHVALUE	C 7	US$ million	FISHDAB
- quantity	FRESHQUANT	C 7	mt	FISHDAB
Dried,salted,smoked				
- value	DRIEDVALUE	C 7	US$ million	FISHDAB
- quantity	DRIEDQUANT	C 7	mt	FISHDAB
Crustaceans & molluscs				
- value	CRUSTVALUE	C 7	US$ million	FISHDAB
- quantity	CRUSTQUANT	C 7	mt	FISHDAB
Canned fish				
- value	CANVALUE	C 7	US$ million	FISHDAB
- quantity	CANQUANT	C 7	mt	FISHDAB
Canned crust.& moll.				
- value	CANCRUSTVL	C 7	US$ million	FISHDAB
- quantity	CANCRUSTQT	C 7	mt	FISHDAB
Oils				
- value	OILVALUE	C 7	US$ million	FISHDAB
- quantity	OILQUANT	C 7	mt	FISHDAB

Meals				
- value	MEALVALUE	C 7	US$ million	FISHDAB
- quantity	MEALQUANT	C 7	mt	FISHDAB

DATA FILE 11: FISH IMPORT BY COMMODITIES (VALUE:US$ MILLION; QUANTITY:MT) (FISHIMPO.dbf)

Title	Field name	C/N No.	Unit	Data source
Country name	COUNTRY	C 12		
Country code	COUNTRYCOD	C 4		
Year	YEAR	C 4		
Total import value	FISHIMPORT	C 7	US$ million	FISHDAB
Fresh,chilled,frozen				
- value	FRESHVALUE	C 7	US$ million	FISHDAB
- quantity	FRESHQUANT	C 7	mt	FISHDAB
Dried,salted,smoked				
- value	DRIEDVALUE	C 7	US$ million	FISHDAB
- quantity	DRIEDQUANT	C 7	mt	FISHDAB
Crustaceans & molluscs				
- value	CRUSTVALUE	C 7	US$ million	FISHDAB
- quantity	CRUSTQUANT	C 7	mt	FISHDAB
Canned fish				
- value	CANVALUE	C 7	US$ million	FISHDAB
- quantity	CANQUANT	C 7	mt	FISHDAB
Canned crust.& moll.				
- value	CANCRUSTVL	C 7	US$ million	FISHDAB
- quantity	CANCRUSTQT	C 7	mt	FISHDAB
Oils				
- value	OILVALUE	C 7	US$ million	FISHDAB
- quantity	OILQUANT	C 7	mt	FISHDAB
Meals				
- value	MEALVALUE	C 7	US$ million	FISHDAB
- quantity	MEALQUANT	C 7	mt	FISHDAB

DATA FILE 12: FISHING FLEET (Numbers) (FISHFLEE.dbf)

Title	Field name	C/N No.	Unit	Data source
INDUSTRIAL FLEET		C 8		
Tot. no. vessels	INDUSTRY1	C 8	Numbers	FIDI/various studies
-total GRT	INDUSTRY2	C 8	Numbers	FIDI/various studies
-no. above 100 GRT	INDUSTRY3	C 8	Numbers	FIDI/various studies
Trawlers no.	TRAWLER1	C 8	Numbers	FIDI/various studies
- total GRT	TRAWLER2	C 8	Numbers	FIDI/various studies
-no. above 100 GRT	TRAWLER3	C 8	Numbers	FIDI/various studies
Purse seiners no.	PURSE1	C 8	Numbers	FIDI/various studies
- total GRT	PURSE2	C 8	Numbers	FIDI/various studies
-no. Above 100 GRT	PURSE3	C 8	Numbers	FIDI/various studies
Others/multi-purpose	MULTI1	C 8	Numbers	FIDI/various studies
- total GRT	MULTI2	C 8	Numbers	FIDI/various studies
-no. above 100 GRT	MULTI3	C 8	Numbers	FIDI/various studies
ARTISANAL FLEETS	TOTALART	C 8	Numbers	various studies
Marine	ARTMARINE	C 8	Numbers	various studies
- no. motorized boat	MOTMARIN	C 8	percent	various studies
Inland	ARTINLAND	C 8	Numbers	various studies
- no. motorized boat	MOTINLAND	C 8	percent	various studies

DATA FILE 13: NATIONAL PRICES OF FISH AND OTHER ANIMAL PRODUCTS (in national currency, per kg)
(SELEFISH.dbf)

Title	Field name	C/N No.	Unit	Data source
Country name	COUNTRY	C 15		
Country code	COUNTRYCOD	C 4		
Year	YEAR	C 4		
Producers/wholesale prices				
.....	PRODUCER1	C 8	*/kg	various studies/reports
.....	PRODUCER2	C 8	*/kg	various studies/reports
.....	PRODUCER3	C 8	*/kg	various studies/reports
.....	PRODUCER4	C 8	*/kg	various studies/reports
.....	PRODUCER5	C 8	*/kg	various studies/reports
Retail price				
.....	RETAIL1	C 8	*/kg	various studies/reports
.....	RETAIL2	C 8	*/kg	various studies/reports
.....	RETAIL3	C 8	*/kg	various studies/reports
.....	RETAIL4	C 8	*/kg	various studies/reports
.....	RETAIL5	C 8	*/kg	various studies/reports

Note: Products (and product names) to be selected, as appropriate, for each country

DATA FILE 14: NATIONAL WAGES AND PRICES (Indices: 1980 = 100; or as given)
(NATIPRIC.dbf)

Title	Field name	C/N No.	Unit	Data source	
Country name	NAME	C 12			
Country code	CODE	C 4			
Year	YEAR	C 4			
Consumer price indices					
General	CPGENERAL	C 6	Number	ILO statistics	
Food	CPFOOD	C 6	Number	ILO statistics	
Fuel	CPFUEL	C 6	Number	ILO statistics	
Retail price index	RETAIL	C 6	Number	AGROSTAT/WNA*	Item 3037/535
Wholesale price index	WHOLESALE	C 6	Number	AGROSTAT/WNA	Item 3037/534
Wage indices					
Wages in agriculture	AGRIWAGE	C 6	Number	ILO statistics	
Wages in non-agr.	NONAGRI	C 6	Number	ILO statistics	

---

* Abbreviations of Agrostat Data Base Domains

LUI = LAND USE, INPUTS AND PRODUCTION
DEA = DEMOGRAPHIC ESTIMATES - ANNUAL SERIES
EAA = ECONOMIC ACCOUNTS FOR AGRICULTURE
CLF = CROPS, LIVESTOCK AND FISHERY PRODUCTS
SUA = SUPPLY/UTILIZATION ACCOUNTS

GDP = UN NATIONAL ACCOUNTS
WBT = WORLD BANK TABLES
WCI = ILO WAGES AND CONSUMER PRICE INDICES
WNA = WORLD BANK NATIONAL ACCOUNTS
WSI = WORLD BANK SOCIO-ECONOMIC INDICATORS
WDB = WORLD DEBT TABLES
FIDI = FISHERY INFORMATION, DATA AND STATISTICS SERVICE
FISHDAB = FISHERY STATISTICAL DATA BASE
FIPIS = FISHERY PROJECT INFORMATION SYSTEM

ANNEX 2

USER'S GUIDE
Installation and Running of FIPPDAT

1 Initial installation of FIPPDAT on hard disk

The package of FIPPDAT was programmed for the use on any IBM compatible personal computer. MS-DOS 3.1 or the upgraded version of MS-DOS is required in order to run the programme.

Please make sure the hard disk of your computer has sufficient storage component to accomodate FIPPDAT. Programme requires a minimum of 512 KB Random Access Memory (RAM) and 3 MB for storing data basefiles for the world. A 3.5 inches drive is required to install the programme from the diskette.

In order to install the FIPPDAT programmes on the hard disk of your computer, you should create a new directory.

Suppose, if you intend to install FIPPDAT on your Drive C of the hard disk, you should type:

```
C:\ MD FIPPDAT
C:\ CD FIPPDAT
```

You will see on the screen:

```
C:\FIPPDAT>
```

To load the programme files of FIPPDAT in to this directory, insert the FIPPDAT programme diskettes in a drive, suppose A, of your PC and type:

```
COPY A:*.*
```

ATTENTION!
You should never copy this package in your hard disk root directory. Make sure you are in the right directory (FIPPDAT) of your hard disk before you copy any files.

2 Getting started

2.1 Installation

In order to run FIPPDAT, move to appropriate directory, and start execution:

```
C:>CD FIPPDAT (press RETURN)

C:>FIPPDAT   (type FIPPDAT and press RETURN)
```

After the introductory disclaimer, the Main Menue appers as below:

You select the options of the Main Menue by highlighting them using arrow keys.

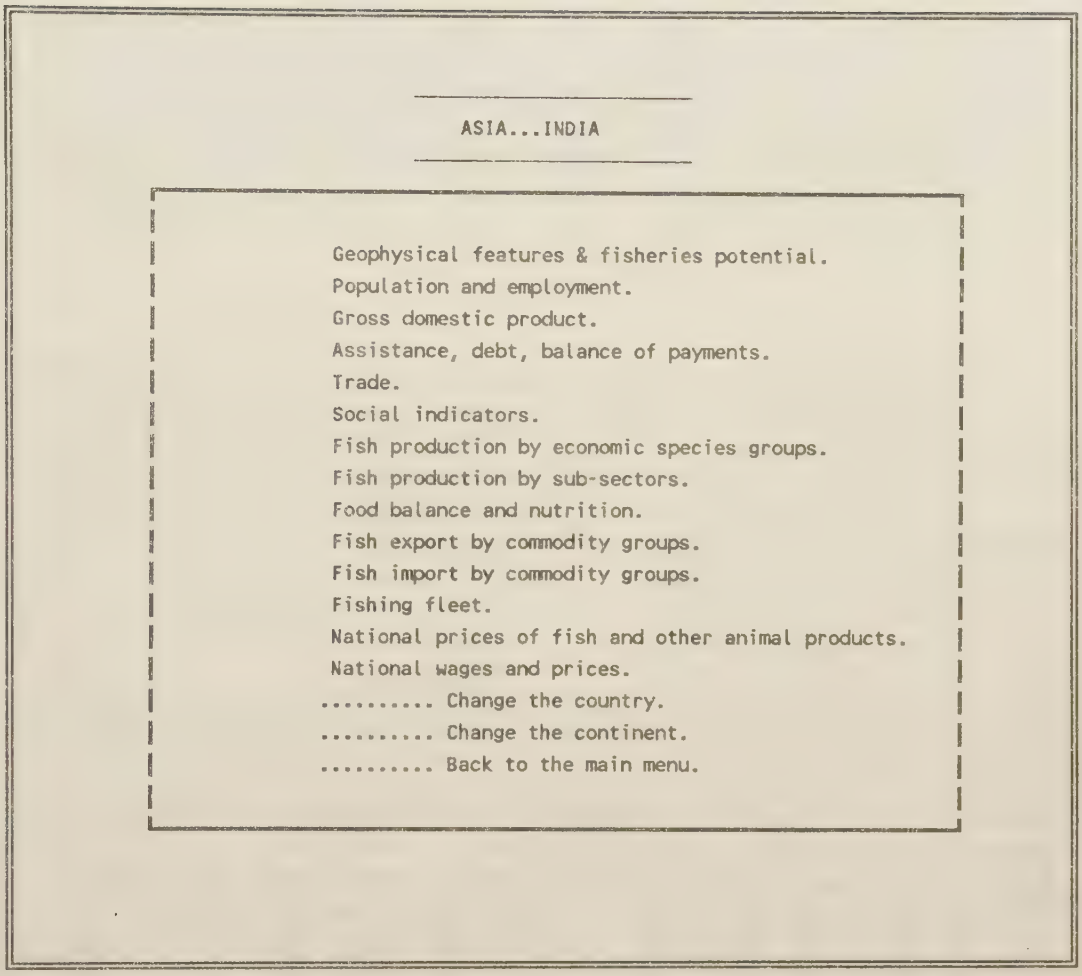
Before selecting any other options, you should operate 6. Utilities and choose 1. Re-index data files option in order to generate the dbase index files (*.ntx) without which the programme does not run.

ATTENTION!

Whenever new data is added or some data is modified in the database files (*.dbf), you need to run 1. Re-index data files option for re-organizing data files.

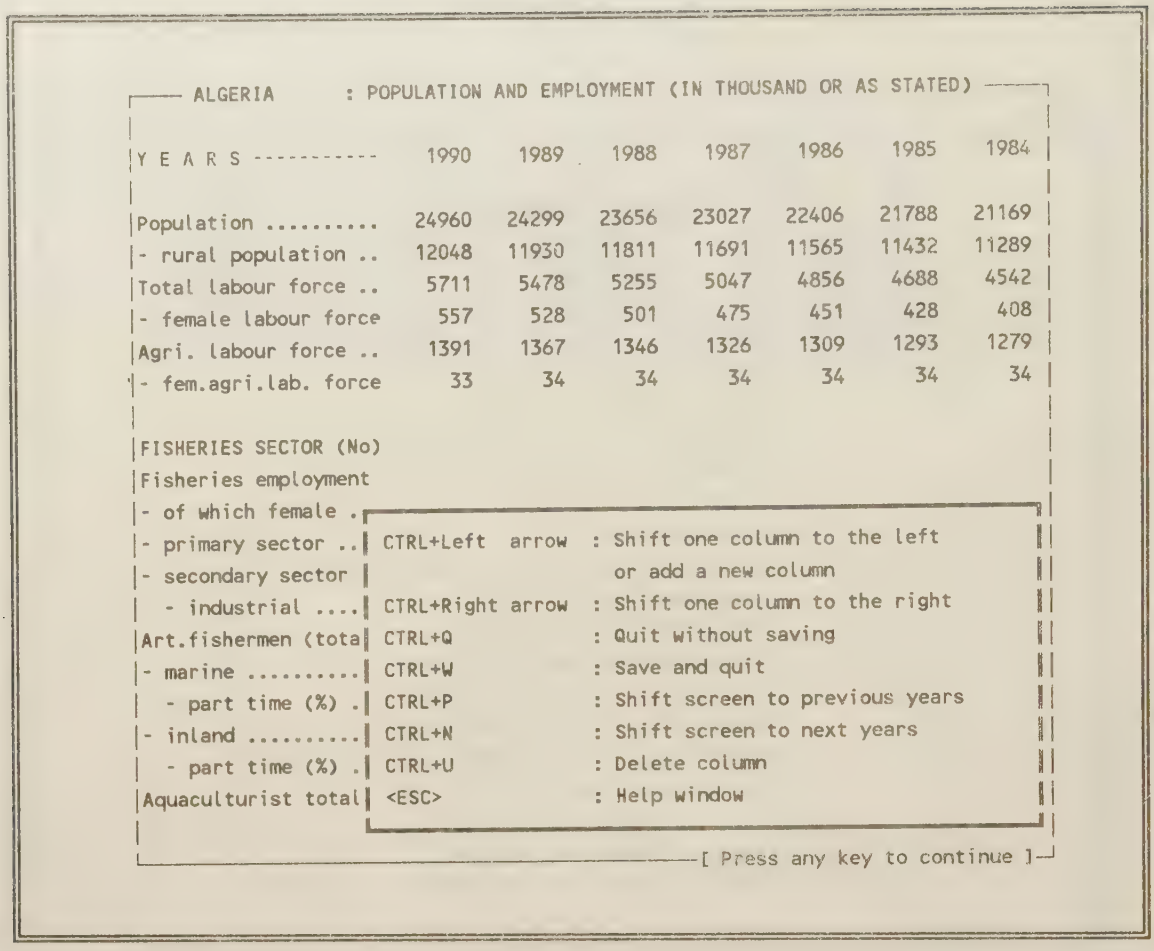
2.2 Data entry and display

This option will allow you to view or enter data for each DATA FILE (File 1 to 14). Select Data entry and display with the arrow keys and press RETURN. You will see on the screen the list of the 14 DATA FILEs as follows:



You choose one of the FILEs in the same manner, i.e. by highlighting the file name (eg. Population and employment) and pressing RETURN. After a few seconds, the data file will be displayed on the screen. You are able to view data page by page. Data is chronologically ordered with most recent data at the left. In order to view previous years which do not appear on the first screen, press **CTRL** and **P**(revious) successively. To go back to more recent data, press **CTRL** and **N**(ext).

Explanation of the function keys will be provided on the screen by pressing **ESC**, as follows;



Data editing

You can over-write figures in highlighted cells. Data can be erased using space bar. For non available data, type a letter **N**, N.A. will appear on the screen.

Adding a new colum

You can create a new colum for a year by pressing **CTRL** and **Left arrow** keys. In case the added year is not the most recent one, the programme will automatically place the colum in the correct order once you save the change.

Quit

When you wish to quit from the data file without saving any changes, press **CTRL** and **Q**(uit).

Saving edited data

If you wish to save all changes made on the screen, you need to quit screen by pressing **CTRL** and **W**(rite).

Deletion of a Column

By pressing **CTRL** and **U** , a highlighted column will be deleted after you have received a warning message.

ATTENTION WITH REGARD TO FILE 1!

Attention must be paid in dealing with Data File 1 : Geographical features and fisheries potential.

In order to edit data on this particular screen;

- use **RETURN** to move from cell to cell.
- use **arrow keys** to change the position of the cursor in the cell.
- press **PAGE DOWN KEY** for quiting from the screen.

ALL CHANGES MADE IN THE FILE 1 WILL BE AUTOMATICALLY SAVED WHEN YOU QUIT !!

2.3 Back-up and restore data files

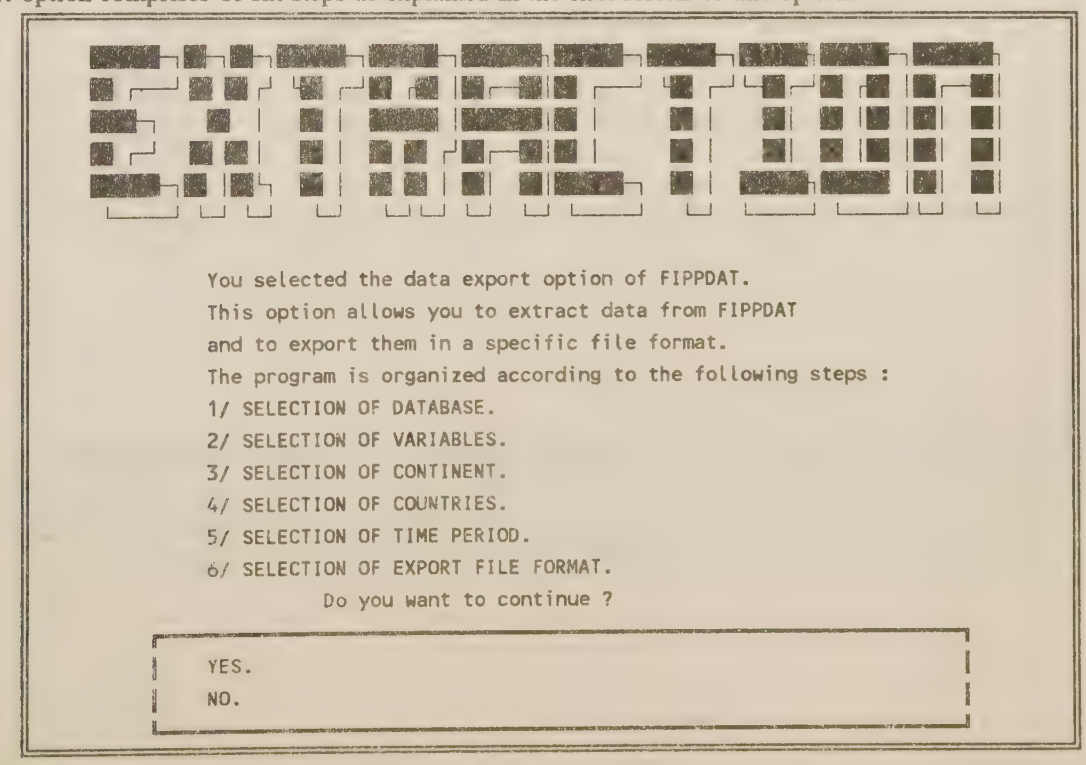
It is advisable to keep always at least one set of back-up copies of all data files contained in FIPPDAT. Utilities contain both functions of making back-up data files and restoring them.

To make back-up files, highlight 6. Utilities from the main menue and press RETURN. When you wish to make back-up files, select 2. back-up data files to disk and insert a formatted disket in the drive A.

You can retrieve data files from the back-up diskettes using the 3. Restore data files from disk option.

2.4 Data extraction and export

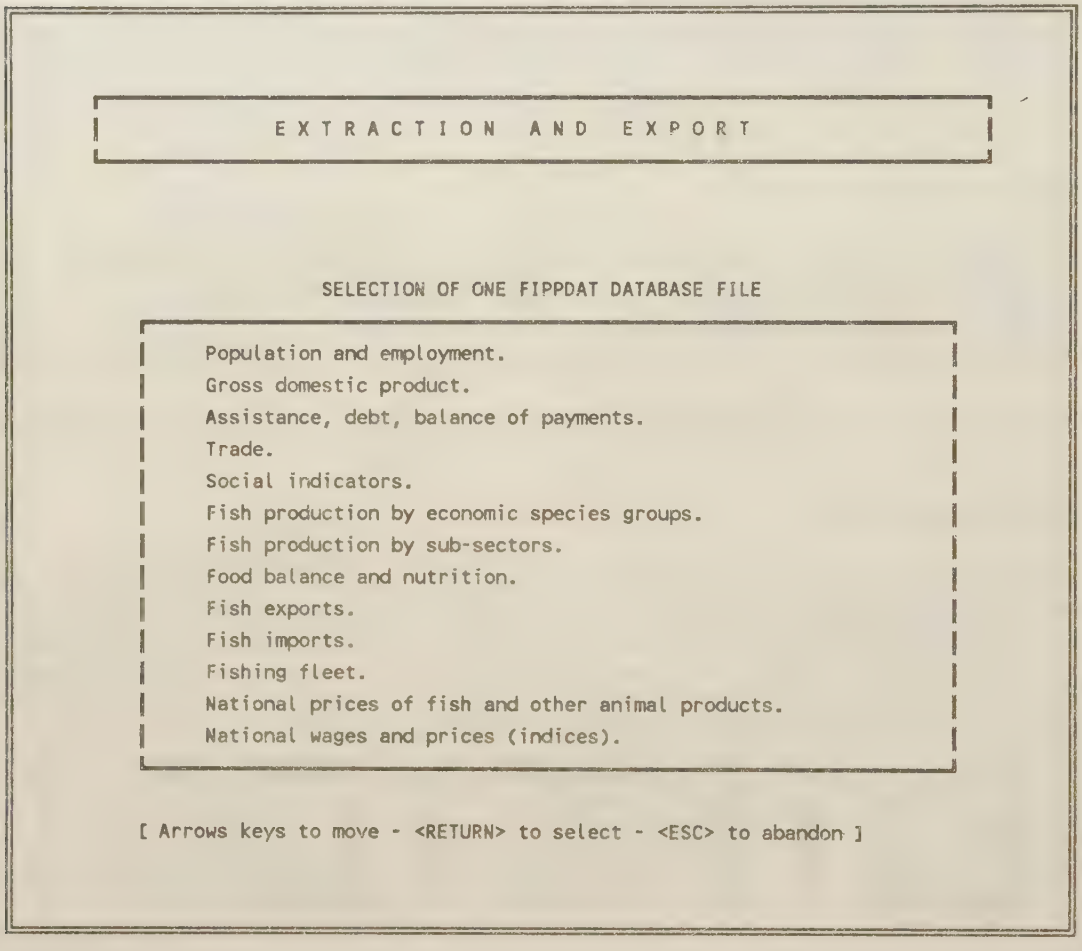
FIPPDAT allows users to extract/retrieve any data available in FIPPDAT and export them to file for printing, to ASCII file for word processing and to spread sheet files for data processing and for graphic presentation. The data extraction enable users to select variables from different data files and for different countries. The user is able to specify the starting and ending years of the time series. Data extraction and export option comprises of six steps as explained in the first screen of this option:



First step: selection of one FIPPDAT database file

This step allows the user to select one of the 13 datafiles (datafiles 2 -14) for data extraction. Data need to be extracted file by file. If required, data of other files can be extracted at a subsequent stage.

Highlight the filename in the screen and press return to continue.



Second step: selection of variables in the selected file

On the right hand of the screen appears the list of variables contained in the selected file. You can choose as many variables as desired by using **arrow** and **RETURN** keys. Once a variable is selected by pressing **RETURN** key, its name appears in bold letters. To unselect the variable, press **RETURN** key again, and the variable name returns to normal font. After selecting the variables, press **ESC** to continue.

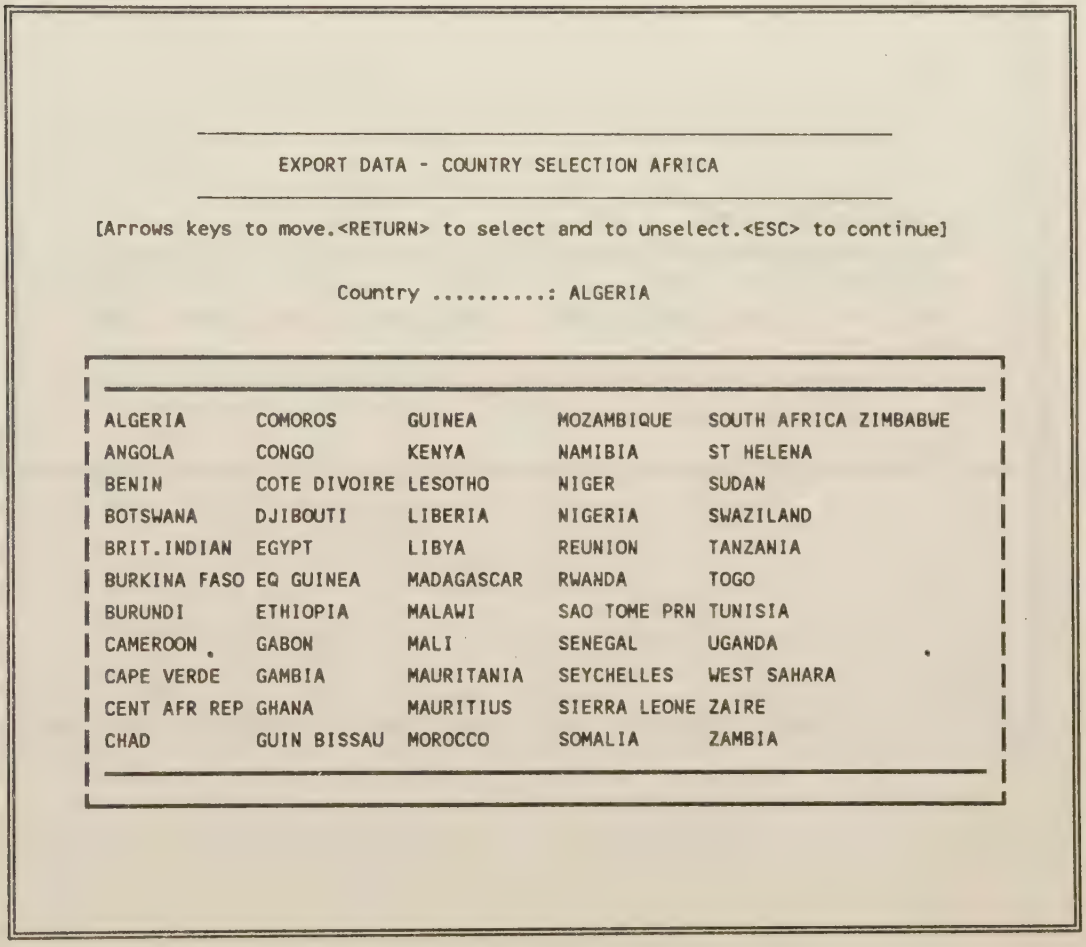
Third step: Selection of a continent

Only one continent can be chosen at a time. Data from other continents can be extracted subsequently.

Fourth step: Selection of countries

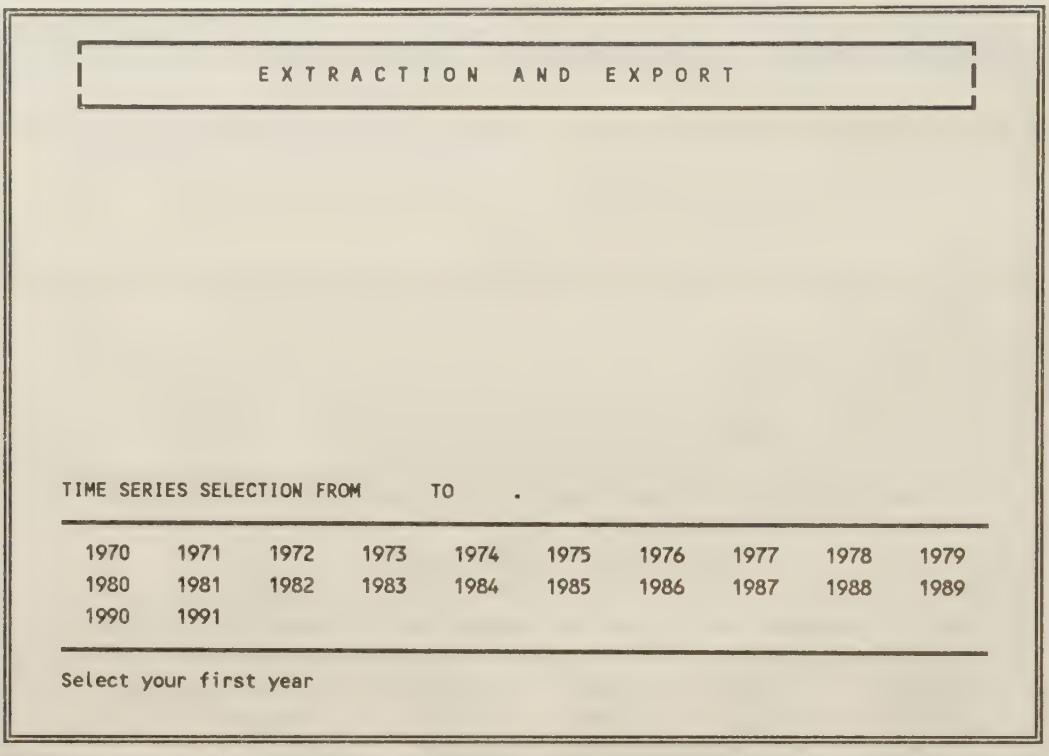
The list of the countries is shown on the screen and the user can select as many countries as required. The selection procedure is the same as explained above. Press **ESC** to continue.

The user may select the same set of variables from countries of other continents before proceeding to the next step.



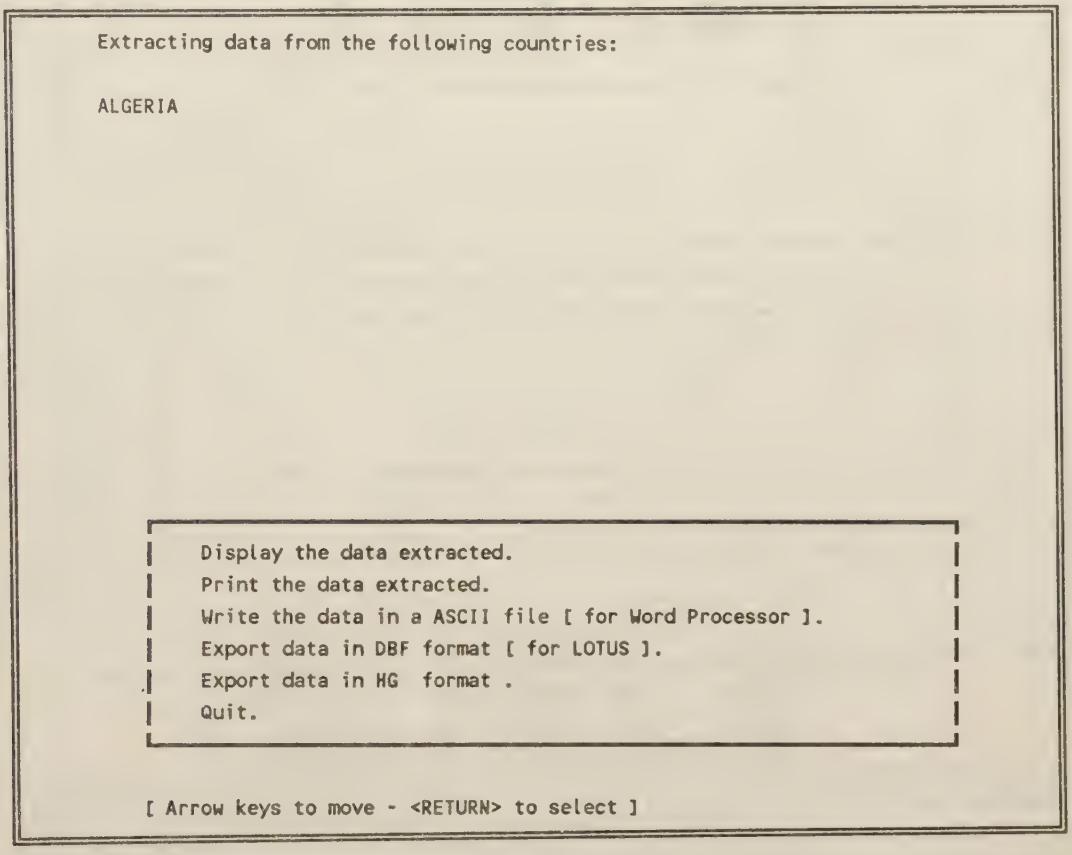
Fifth step: Selection of time period

The user is required to choose the starting and ending year of the time series.



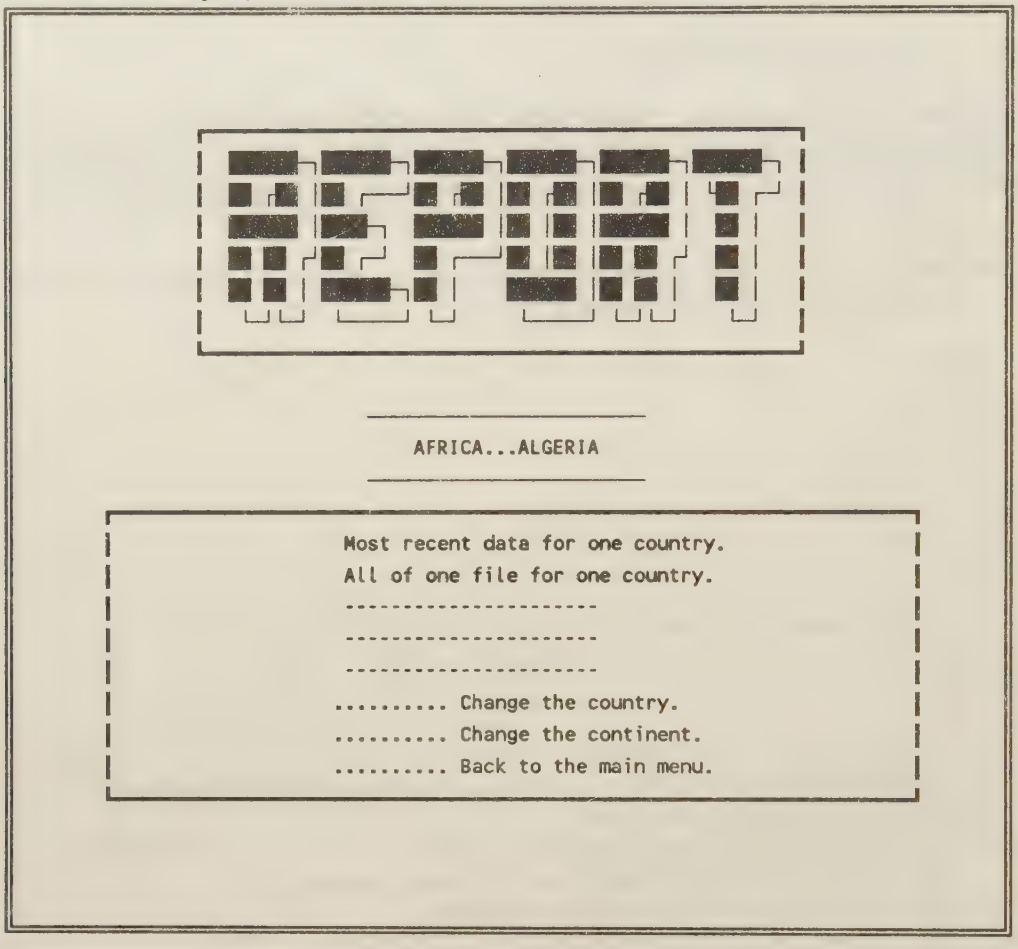
Sixth step: Selection of export file format

Extracted data can be viewed by selecting Display the data extracted or printed by selecting Print the data extracted. Write the data in a ascci file will allow subsequent import into a wordprocessing package. In order to manupulate data using database or spreadsheet application, the user may export data in DBF format.



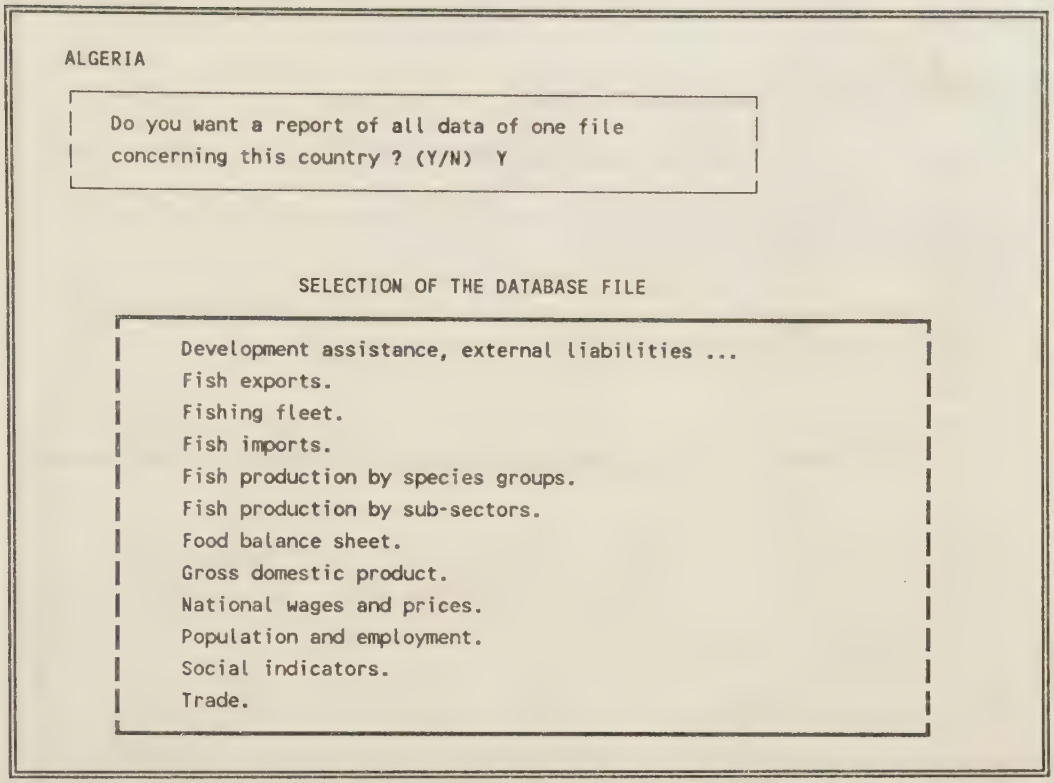
2.5 Report option

There are two options for making reports of FIPPDAT datafiles: 1) list of the most recent data of all variables for one country; 2) time series data of a selected data file.



To choose an option of report of the most recent data for one country, highlight Most recent data for one country and press RETURN. The latest data from each file will appear on the screen. In order to stop scrolling of a screen, press PAUSE or Ctrl and S. Press any key to continue. Reported data can be printed or saved on file.

To make a report of time series of all data contained in one file, choose All of one file for one country. Highlight a file to report. Reported data can be printed or saved on file.



2.6 Search option

This option allows the user to search those countries for which one or several variables fall within a specified range.

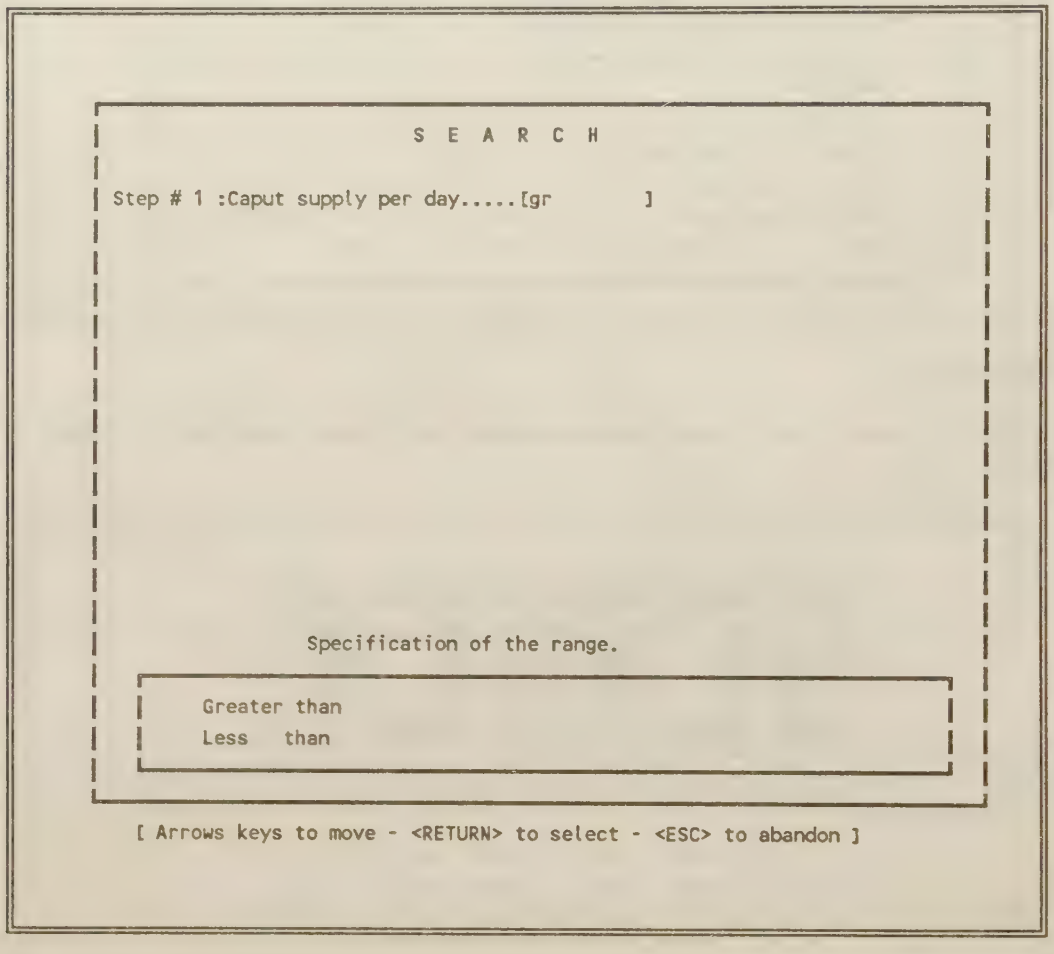
There are three steps to follow.

Step 1: Selection of a data file

Select 2. Search option from the main menue and choose datafile and the variable on which to base the serarch.

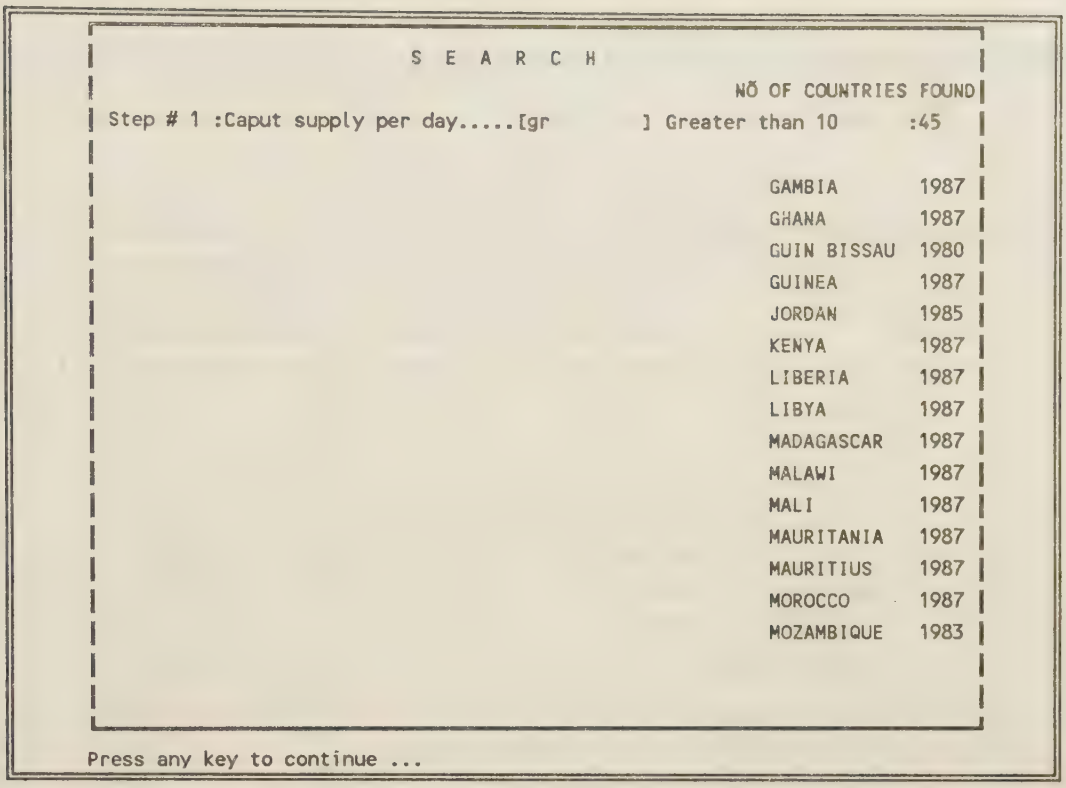
Step 2: Specification of the value range of the variable

You are required to define the value range of the variable by specifying the "greater than" or "less than"criteria. Enter the desired range and press **RETURN** to start search.



Step 3: Presentation of search results

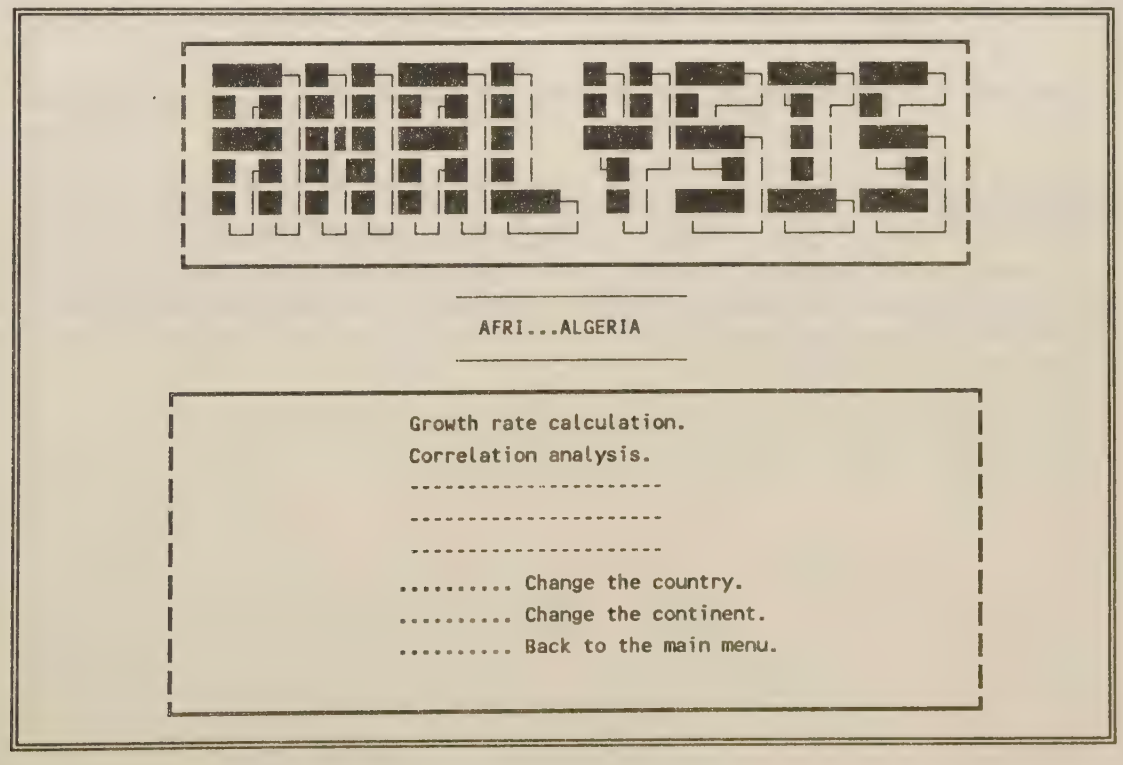
The search will result in the number and the names of countries which fulfil the value criteria specified above.



The user may subsequently cross search the identified countries on another variable.

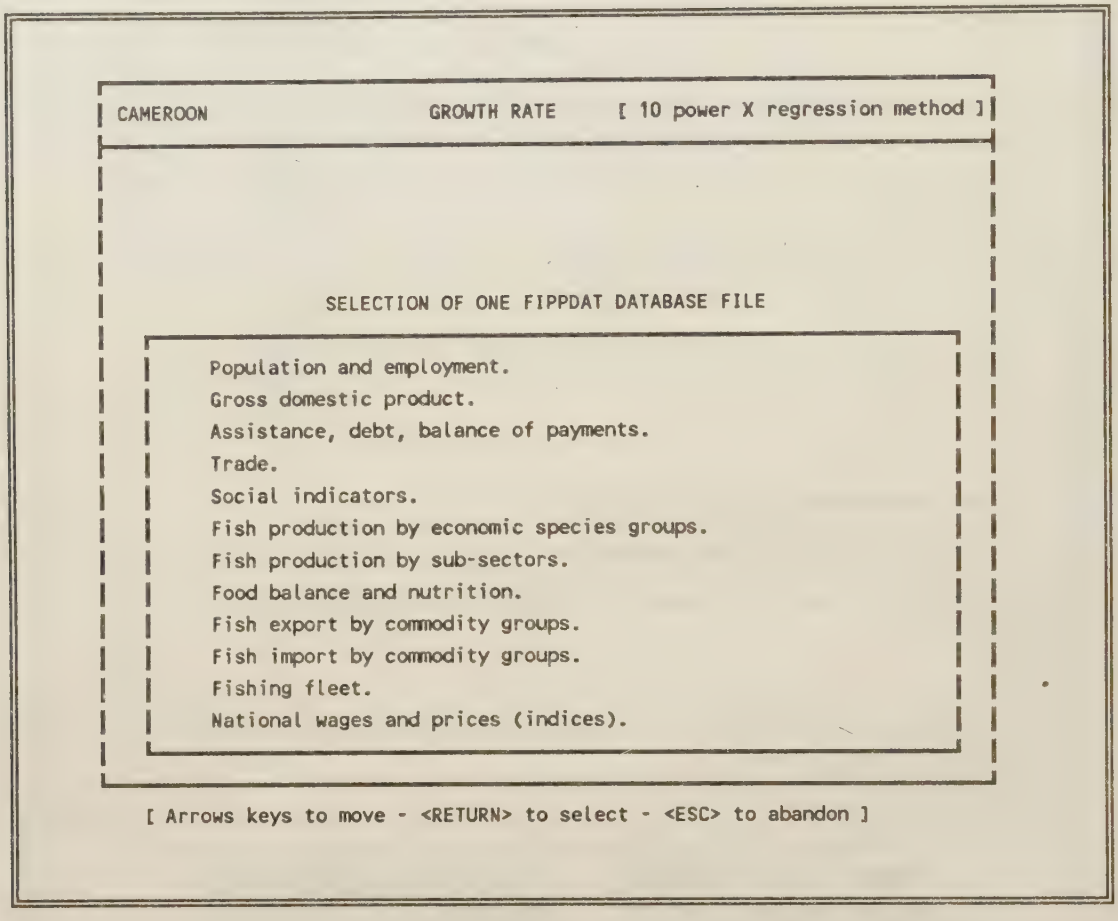
2.7 Analysis

The option allows the caluculation of the compounded gowth rate of one selected variable and the correlation co-efficient for tow variables.



Step 1: Select data file(s) and variable(s)

Hilight a file in which variable(s) are contained. One must choose files one after the other.



Step 2: Specify years

The user is required to specify the starting year and the number of years of the period to be analyzed. Suppose you want to obtain the growth rate of fish production in the period 1983 to 1989: type "1983" in the colum "starting year" and "7" in "number of years". If you wish to change the time period, press any key and repeat the above procedure.

To quit from the screen, type 0 in the colum of years.

```
CAMEROON                    GROWTH RATE     [ 10 power X regression method ]

Population and employment. Population

  1970 |    6610 |  1985 |   10051 |
  1971 |    6777 |  1986 |   10374 |
  1972 |    6951 |  1987 |   10714 |
  1973 |    7132 |  1988 |   11071 |
  1974 |    7322 |  1989 |   11444 |
  1975 |    7520 |  1990 |   11833 |
  1976 |    7728 |
  1977 |    7945 |                        Starting year ...: 1980
  1978 |    8171 |
  1979 |    8407 |                        Number of years .:  5
  1980 |    8653 |
  1981 |    8908 |                        Growth rate (%).:  3.01
  1982 |    9174 |
  1983 |    9452 |
  1984 |    9743 |

   [Press any key to continue]
```

ATTENTION !

For caluculating the correlation co-efficient, you must choose variables that cover the same time period and for which there exist complete data sets. If there is any missing figure, error message appears on the screen.

ANNEX 3

Summary information on FAO Databases related to fisheries

FAO information system of agricultural statistics (AGROSTAT)

Database established: 1985
Subject scope: Agricultural production, agricultural products, agricultural statistics, input-output tables, trade statistics
Coverage: Worldwide
Time span: 1961-
Computer: IBM mainframe

Distribution media: Diskette, magnetic tape, print-out
Contact: Statistics Division, Economic and Social Policy Department (ESC)

Fishery Statistical Data Base (FISHDAB)

Database established: 1976

Subject scope: Catch, aquaculture, production, trade, fishery fleet, fishermen
Computer: IBM main frame, VAX 4000, PCs
Time span: catches and landings, 1970 -
production and trade of fishery commodities, 1976-
fishery vessels, 1970 -
fishermen, 1970 -
aquaculture, 1984 -
Distribution media:
diskette, magnetic tape, pint-outs, FAO Yearbooks of fishery statistics, FAO Bulletin of fishery statistics, Working documents

Contact: Fishery Information, Data and Statistics Service (FIDI)

FISHDAB is a data base on fish catches and landings data, by marine and inland fishing areas, production and trade in fish and fishery products, fishery vessels and fishermen.

FISHDAB contains three major collections of data: statistics of fish catches and landings, statistics of domestic production of fishery commodities and of import/export of such commodities and the structure of the fishery fleets. Catch and landing information are available by species, and fishing areas. Domestic production and trade information are made available by commodity groups, by species, by countries. Fishery fleet data are available by county, by vessel size and vessel type.

Fishery Project Information System (FIPIS)

Database established: 1989
Subject scope: Types of assistance, project status, financial contribution, etc.
Coverage: Worldwide
Time span: 1985-
Computer: IBM PC
Contact: Development Planning Service, Fishery Policy and Planning Division (FIPP)

FIPIS is a register and a focal point providing information on external assistance to fishery and aquaculture from bilateral and multilateral aid agencies.

FIPIS has objectives to coordinate donor agencies activities more effectively by providing access to a

database from which can be retrieved a range of information about external assistance projects in the fishery sector.

FIPIS contains information on externally assisted projects including recipient country, donor agency, executing agency, project title, project objectives, project status, duration of the project, project cost, co-financing information etc..

Fishery agreement register (FAR)

Database established: 1991
Computer: IBM PC
Contact: International Institutions and Liaison Service, Fishery Policy and Planning division (FIPL)

FAR is a data management system for the storage and retrieval of information relating to bilateral and multilateral fishing agreements. Originally, an information base on fishing agreements was established in 1975, which has now been transformed into PC based database, FAR. FAR contains information on fishing agreements including parties involved, status and type, title and key words in the text of the agreement.

Database on the inland fishery resources of Africa (DIFRA)

Database established: 1990
Computer: IBM PC
Contact: Inland Water Resources and Aquaculture Service, Fishery Resources and Environment Division (FIRI)

DIFRA is a database to provide information on African inland fisheries and fishery potential.

It contained selected data of more than 1000 African inland waters classified into five types of water bodies (lakes, rivers and floodplain, reservoirs, swamps and coastal lagoons). Morphometric and limnological information are also included as well as fishery statistics. Potential yield estimates from analytical studies and fisheries are also included.

FAO Global species Database for Fishery Purposes (SPECIESDAB)

Status of database : under finalization
Computer: IBM PC
Contact: Marine Resources Service, Fishery Resources and Environment Division (FIRM)

SPECIESDAB is developed for the main purpose of serving as FAO's standard nomenclatorial authority on aquatic species and as a framework for the storage of core data by species.

The elementary units of the database are the individual biological species. As of 1990, the database comprises about 2500 species belonging to 18 of the most important resources groups. Information include geographical distribution, depth, size, habitat, fishing gear and as well as information on nomenclature.

Database on fish capture and aquaculture technology

Status of database: under development
Computer: CDS/ISIS
Contact: Fishing Technology Service, Fishery Industries Division (FIIT)

Database was developed under the project DP/INT/86/012 "Clearing house for fisheries advisory

services". The long term objective of the project is to foster greater self-sufficiency in fishing technology and aquaculture techniques in order to increase/improve harvesting of available resources. In particular, the database places emphasis on the development technical cooperation among developing countries (TCDC).

The system is composed of the following three registers:

1) register of equipment manufactures and suppliers
2) register of institutions or companies working in fishing technology and aquaculture
3) register of experts in aquaculture and fishing technology.

Database on research vessels

Status of data base: under development
Contact: Fishing Technology Service, Fishery Industries Division (FIIT)

There is a lack of research vessels in many developing countries due to financial and technical constraints. The database on research vessels has been developed in order to enable developing countires to make use of underutilized research vessels available in the world by assisting concerned countries in establishing agreements. The database contains a register of research vessels operating particularly in developing countries. The information includes main technical characteristics, area of operation, availabilities etc.)

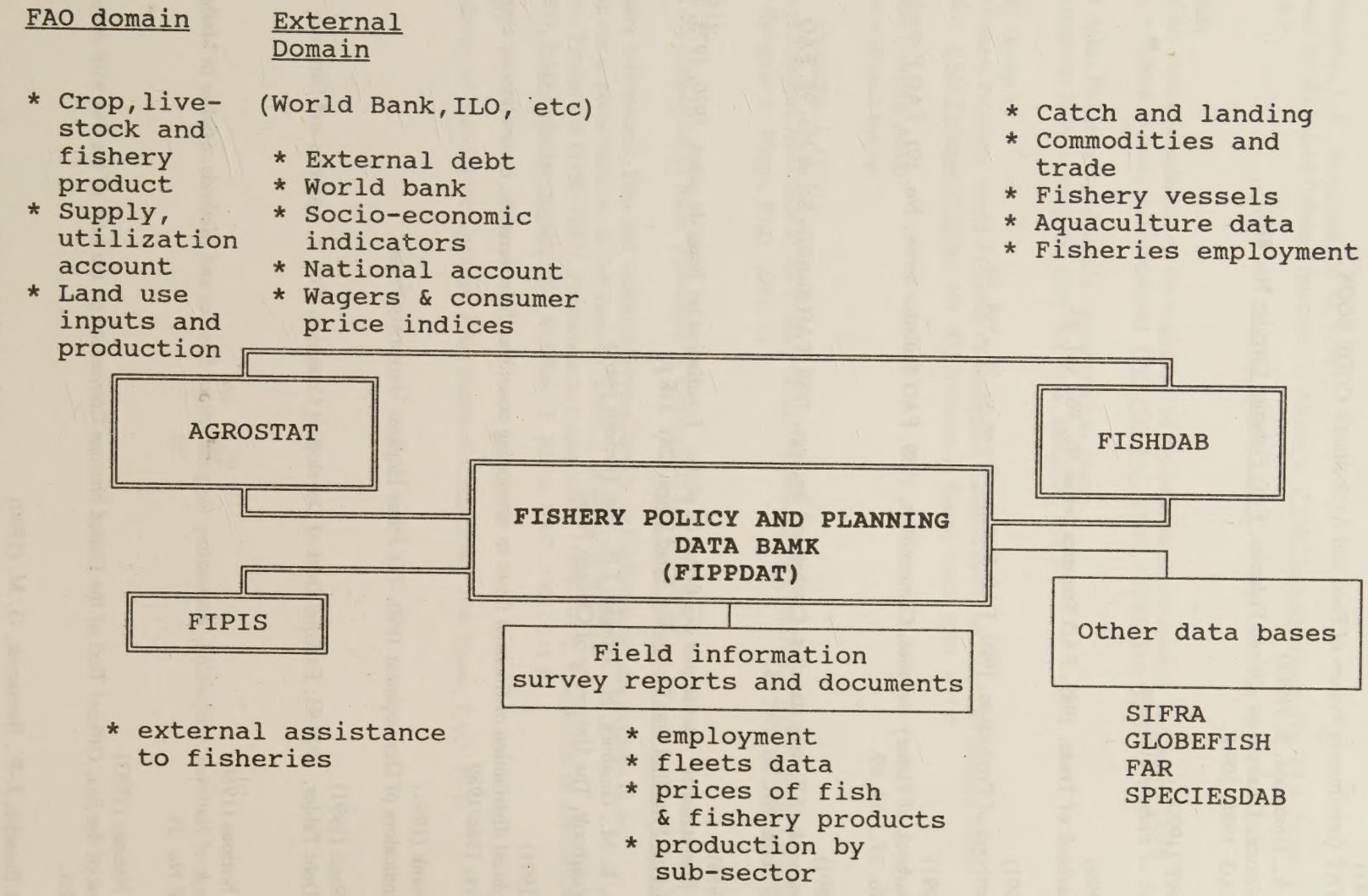
GLOBEFISH Database

Database established: 1984
Computer: IBM main frame, external host on-line
Contact: Fish Utilization and Marketing Service, Fishery Industries Division (FIIU)

GLOBEFISH is a worldwide fish marketing information system. Information is compiled through directly linked regional databases: INFOFISH, INFOPESCA, INFOPECHE, INFOSAMAK. GLOBEFISH is primarily intended to provide fish marketing information to member countires of FAO Fish Marketing Inforatmion System and GLOBEFISH sponsoring countries.

GLOBEFISH contains information on trade, price series, product development, aquaculture, joint ventures, investment, fisheries agreement etc on key commercial commodities (shrimp, tuna, groundfish, small pelagics, salmon, lobsters, fishmeal etc.)

Figure 1 **Linkage between FIPPDAT and its sources of information**



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